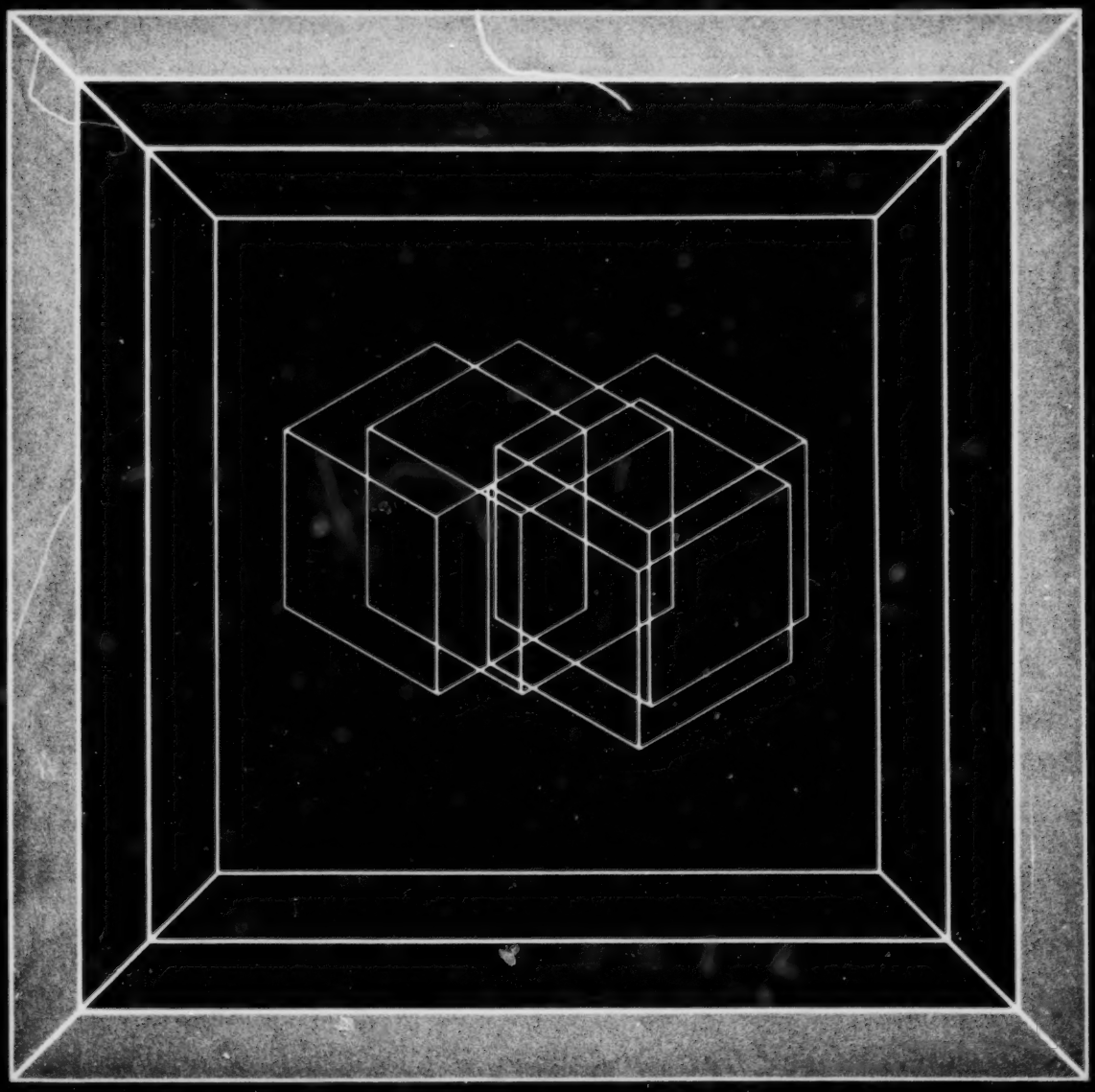
The Choice of Governing Instrument

M.J. Trebilcock R.S. Prichard
D.G. Hartle D.N. Dewees

A study prepared for the
Economic Council of Canada



86-0349/

The **Economic Council of Canada** was established in 1963 by Act of Parliament. The Council is a Crown corporation consisting of a Chairman, two Directors and not more than twenty-five Members appointed by the Governor in Council.

The Council is an independent advisory body with broad terms of reference to study, advise and report on a very wide range of matters relating to Canada's economic development. The Council is empowered to conduct studies and inquiries on its own initiative, or if directed to do so by the Minister, and to report on these activities. The Council is required to publish annually a review of medium- and long-term economic prospects and problems. In addition it may publish such other studies and reports as it sees fit.

The Chairman is the Chief Executive Officer of the Council and has supervision over and direction of the work and staff of the Council. The expenses of the Council are paid out of money appropriated by Parliament for the purpose.

The Council as a corporate body bears final responsibility for the *Annual Review*, and for certain other reports which are clearly designated as *Council Reports*. The Council also publishes *Research Studies, Discussion Papers* and *Conference Proceedings* which are clearly attributed to individual authors rather than the Council as a whole. While the Council establishes general policy regarding such studies, it is the Chairman of the Council who bears final responsibility for the decision to publish authored research studies, discussion papers and conference proceedings under the imprint of the Council. The Chairman, in reaching a judgment on the competence and relevance of each author-attributed study or paper, is advised by the two Directors. In addition, for *authored Research Studies* the Chairman and the two Directors weigh the views of expert outside readers who report in confidence on the quality of the work. Publication of an author-attributed study or paper signifies that it is deemed a competent treatment worthy of public consideration, but does not imply endorsement of conclusions or recommendations by either the Chairman or Council members.

The Choice of Governing Instrument

The Authors

Michael J. Trebilcock

Born in New Zealand in 1941; studies in law at the University of Canterbury (LL.B.) and the University of Adelaide (LL.M.); former vice-president of the Consumers Association of Canada; associate professor of law at the McGill Law School (1970-72); since 1976, director of the Law and Economics Programme at the University of Toronto Law School; author of several articles and books on consumer protection and regulatory reform.

Douglas G. Hartle

Born in 1927; has acted as advisor to several government bodies and to UNESCO; former research director at the Carter Commission; founding director of the Institute for Policy Analysis; deputy secretary of the Treasury Board Secretariat in the early 1970s; currently professor of economics at the University of Toronto and research director at the Ontario Economic Council; has written extensively on economic policy making in government; Fellow of the Royal Society of Canada.

J. Robert S. Prichard

Born in 1949; studies at Swarthmore College (economics), the University of Chicago (M.B.A.), the University of Toronto (LL.B.) and Yale University (LL.M.); currently associate professor of law at the University of Toronto; has served on a number of enquiry commissions and task forces, and authored (or co-authored) several articles and books on regulation and the economic aspects of consumer law.

Donald N. Dewees

Born in Los Angeles in 1941; studies at Swarthmore College and at Harvard University (LL.B.; Ph.D. in economics); currently professor of law and economics at the University of Toronto, and associate of the Institute for Policy Analysis and the Institute of Environmental Studies; has written extensively on the economics of pollution control, transportation planning, and environmental management.

MICHAEL J. TREBILCOCK
DOUGLAS G. HARTLE
J. ROBERT S. PRICHARD
DONALD N. DEWEES

The Choice of Governing Instrument

The findings of this study are the personal responsibility of the authors and, as such, have not been endorsed by Members of the Economic Council of Canada.

© Minister of Supply and Services Canada 1982

Available in Canada through

Authorized Bookstore Agents
and other bookstores

or by mail from

Canadian Government Publishing Centre
Supply and Services Canada
Ottawa, Canada, K1A 0S9

Catalogue No. EC22-101/1982E
ISBN 0-660-11067-9

Canada: $ 8.95
Other Countries: $10.75

Price subject to change without notice

Contents

Acknowledgments ix

1 Introduction 1

2 The Perspectives of the Principal Actors in the Decision-Making Process 3
The Basic Framework 5
The Special-Interest-Group Game 7
The Political Game 10
The Bureaucratic Game 13
The Media Game 15
Some Concluding Observations 17

3 The Choice of Governing Instrument: The Calculus of Decision 21
Technical Efficiency and Instrument Choice: The Thesis Stated 22
A Positive Theory of Technical Efficiency 22
A Normative Theory of Technical Efficiency 23
Technical Efficiency and Instrument Choice: The Thesis Evaluated 24
The Means-Ends Relationship 24
The Interdependence of Instruments and Objectives 25
An Alternative Hypothesis: Political Rationality and Instrument Choice 27
Legal Constraints on Instrument Choice 27
Marginal and Infra-Marginal Voters 28
Imperfect Information 30
Dynamic versus Static Models of Instrument Choice 32
Some Political Axioms Governing Instrument Choice 33
Conclusions 34

4 Public Inquiries 37
The Primary Types of Inquiries 39
Royal Commissions 39
Task Forces 40
Parliamentary Committees 40
Statutory Regulatory and Advisory Agencies 41
Departmental and Interdepartmental Studies 42
The Substitutability of Public Inquiries for Other Instruments 43
Substitutability among Different Types of Inquiries 44

Accountability 45
Political Dynamics 46
Participation 47
Visibility 47
Timing 48
Costs 48
Reform Proposals 49
Conclusion 50

5 Taxation, Expenditures, and Debt Management 51
Debt Management 51
Taxation 53
Efficiency in Taxation 53
Illusion in Taxation 55
Expenditures 61
Administrative Costs 61
Compliance Costs 62
Relative Allocative Efficiency of Expenditure Forms 63
Illusion in Expenditures 67

6 Public Enterprise 73
Public Enterprise: Definition and Characteristics 74
Legal Characteristics 74
Institutional Characteristics 75
Substitutability 82
Substitutability of Crown Corporations for Other Instruments 83
Reform Proposals 84

7 Regulation 87
The Range of Regulatory Instruments 87
Substitutability within the Class of Regulatory Instruments 88
Direct Regulation 88
Delegated Regulation: Statutory Regulatory Agencies 89
Delegated Regulation: Self-Regulation 91
Substitutability between Regulation and
Other Classes of Instruments 92
Environmental Regulation 93
Agricultural Marketing Boards 95
Regulatory Reforms Affecting the Choice of Instruments 97

8 Concluding Observations: What is Responsible Regulation? 101

Notes 105

Bibliography 109

List of Tables

5-1 Consolidated Government Gross General Revenue, 1975-76 53
5-2 Consolidated Government Gross General Expenditure, 1975-76 61

List of Figures

2-1	The Four Interrelated Games	7
2-2	A Simplified Illustration of the "Free-Rider" Problem	9

Acknowledgments

In the preparation of this study, we gratefully acknowledge the support and assistance of William Stanbury, Research Director, Regulation Reference, Economic Council of Canada, as well as the helpful comments of Marsha Chandler and participants in the Law and Economics Workshop Series, University of Toronto. The comments of the anonymous referees are acknowledged, as is the research assistance provided for various aspects of this study by John Gibson, Daniel Vincent, Elaine Kirsch, and Albert Hudec. The secretarial assistance of Verna Percival, Nancy Cole, and Nancy Savoie was invaluable.

1 Introduction

In contemporary debates over the reform of regulation, two related strands of argument stress the efficiency losses from misdirected regulation. The first emphasizes that the objectives of many regulatory regimes necessarily create, rather than correct for, allocative inefficiencies and thus are not welfare maximizing. The proponents of deregulation are strongly influenced by this view. The second strand of argument accepts that the objectives of many regulatory regimes will be inconsistent with the promotion of allocative efficiency and indeed will often be expressly designed to counteract the effects of private markets, even where these are functioning efficiently. Instead, the argument is made that whatever the regulatory objective in question, the most efficient means (or instrument) should be chosen to achieve that objective. In other words, while the ends of the regulation need not always be efficient, at least the means should be. This view thus countenances regulatory interventions in circumstances where more extreme proponents of deregulation would repudiate them. The more modest ascription of weight to technical, or instrumental, efficiency is, at first sight, compelling. The decision calculus it embodies appears to assert an axiomatic truth – namely, that whatever the ends, we should always attempt to get there by the least-cost means. A central purpose of this paper is to evaluate this thesis and develop alternative hypotheses that seek to explain the choice of governing instruments in democratic capitalist societies.

The fact that in most policy contexts decision makers have available to them a range of alternative instruments that can technically be deployed in the promotion of given policy objectives seems uncontroversial. If a government wishes to control a monopoly, it can subject it to competition law (e.g. require divestiture or order cessation of monopolistic practices; it can tax away monopoly profits; it can regulate prices and output through a statutory regulatory agency or other agency of government; it can, in the case of natural monopolies, auction off monopolistic entitlements; it can take over and publicly own the resource in question; in the latter event, it can rely on public ownership alone or subject the publicly owned firm to regulation by a statutory regulatory agency or other agency of government. In fact, we observe all of these instruments being employed to control monopolies. If a government wishes to promote indigenous cultural activity, it can engage in public ownership, as in the case of the Canadian Broadcasting Corporation or the National Film Board; provide direct subsidies to theatre groups; finance granting institutions (e.g. the Canada Council); provide tax incentives, such as a capital cost allowance on films or an expense allowance for advertising; and engage in regulation (e.g. through the Canadian Radio-Television and Telecommunications Commission's broadcasting content rules). If a government wishes to enhance farmers' incomes, it can send them cheques, create agricultural marketing boards that impose price and production restrictions, provide special tax concessions, or impose import quotas. If a government is concerned about the hazards of products or the hazards of the workplace, it can create private rights of action; introduce insurance schemes; provide, or mandate the supply of, information about the hazards to affected parties; or set standards, which it can do directly through a department of government or indirectly through a statutory regulatory agency.

Across the entire landscape of government activities, we note that these kinds of choices are almost always available. In fact, we observe a wide spectrum of instruments being chosen, often in conjunction with one another, by different governments at different times in given policy contexts. The puzzle that this presents is, in the first instance, that of identifying the factors that enter a policy maker's calculus in matching instruments with objectives, or means with ends. Resolving this puzzle is central to many aspects of regulatory reform. Two very large issues are bound up in its resolution. First assuming, as we should, that the process of instrument choice is not random but one that reflects decision making under certain kinds of constraints, identification of the nature of these constraints is important in determining the options open to reformers of regulation when seeking to

achieve a different matching of instruments and objectives.

Second, the fact that, both technically and empirically, a wide choice of instruments is available to policy makers in many policy contexts appears to imply a high degree of substitutability among many of these instruments. The degree of substitutability among instruments in meeting an objective might, in economic jargon, be measured as the cross-elasticity of supply of the instrument. This factor will directly influence the effectiveness of instrument-specific reform proposals. That is, to the extent that instruments have a high cross-elasticity of supply in a certain setting, a change in the characteristics of one of the instruments is likely to lead to substitutions among the instruments. Therefore, if the change is perceived by the decision makers as an increase in "price" of the instrument, one should expect that the decision makers will, over time, decrease the utilization of that instrument, substituting for it relatively lower priced instruments. For example, if public participation and openness in decision making are considered unattractive by the decision makers, a change enhancing the participation and openness in a particular instrument is likely to lead to a decrease in that instrument's utilization, absent comparable reforms to all other instruments having a high cross-elasticity of supply. The implication of this concept is that attempts at instrument-specific reforms are substantially constrained by the substitutability of instruments. The concept also implies that in circumstances involving a high cross-elasticity of supply of instruments, changes should be more broadly structured so as to avoid undue focus on any particular instrument.

These two issues – the nature of the constraints under which policy makers choose instruments, and the factors that determine the degree of substitutability among instruments – dominate much of the analysis that follows in this study. In the next chapter we examine alternative explanations of state intervention in the economy. By understanding better the factors that induce state intervention, we should be in a better position to understand the process of instrument choice. We then examine the perspectives of the central classes of actors in the political process – politicians, bureaucrats, regulators, interest groups, and the media – on the choice of governing instruments. Drawing on the analysis in Chapter 2, we evaluate, in Chapter 3, the thesis that instruments are, or at least should be, chosen on the basis of relative technical efficiency, and we construct alternative hypotheses as to the calculus of instrument choice. In Chapters 4, 5, 6, and 7, we examine the institutional characteristics of some of the major classes of instruments with a view to identifying those characteristics that are likely to be influential in instrument choice, given the calculus of choice that we develop in the latter part of Chapter 3. The classes of instruments examined are: 1/ government studies or investigations of issues of public concern; 2/ tax and expenditure instruments; 3/ public ownership; and 4/ regulatory instruments. We conclude the study, in Chapter 8, with some implications of our analysis for regulatory reform. In a companion study, recently published by the Economic Council of Canada as a technical report, we draw on our general analysis of the policy-making process, as well as the calculus of instrument choice in Chapters 2 and 3 and the instrument-specific analysis of critical choice variables in Chapters 4 to 7, to present four applications that attempt to test in a highly preliminary and impressionistic way the strength of our analysis. In these applications, we attempt to explain observed patterns of instrument choice in the areas of broadcasting content regulation, the capture of rent in the energy field, environmental regulation, and trade protection.

2 The Perspectives of the Principal Actors in the Decision-Making Process

This chapter is primarily concerned with the different perspectives of interest group leaders, politicians, bureaucrats, and the media with respect to collective policy decision making. It emphasizes the unique incentive system under which each of these groups pursue their self-interest. This way of conceptualizing the policy choice issue, of which the choice of instrument is a significant aspect, is very unlike that of traditional economics. This introduction provides a brief sketch of the latter not only to highlight that difference but, more importantly, to assist the reader in following some of the analyses of conventional economics that are being contested to some degree in subsequent chapters. For a more detailed discussion of the material covered in this chapter, see Hartle [1979], p. 145.

Few would deny that democratic governments perform two necessary functions: they make and enforce rules, particularly those related to property rights, broadly conceived; and they provide services, particularly those that cannot be supplied in adequate quantity or quality through the market. Also, few would deny that the enforced rules and the services provided should serve to promote some widely accepted objectives: national sovereignty, the rule of the law, human rights, equality of opportunity, full employment, a stable level of prices, a rising standard of living, environmental quality, a more equitable distribution of income/wealth, and so on. The list is well nigh endless. And each objective is capable of a multitude of interpretations. Many of the objectives are in conflict: the greater realization of one good thing necessarily exacts a price in the lesser realization of one or more other good things. Furthermore, as the degree of specificity in the definition of objectives increases, the degree of consensus concerning their relative importance declines. Indeed, some individuals accord such little weight to some objectives that when trade-offs are necessary they are willing to sacrifice those objectives completely.

The same is painfully true with respect to the selection of the means (instruments) that *should* be adopted by governments to further the realization of the multiplicity of objectives. As discussed at considerable length in this paper, the same objective can frequently be realized to roughly the same extent by alternative means. Politicians, bureaucrats, special interest groups, and the electorate generally are not indifferent towards theoretically substitutable instruments. In short, when one moves from the banalities to the realities, unanimity seldom, if ever, prevails concerning the appropriate objectives of government, the appropriate weight to be attached to each objective, or the appropriate policy instrument for achieving them.

There are several reasons for this lack of consensus or, to put the matter another way, for the omnipresence of a degree of coercion in government decision making. One reason is that many of the objectives are intangible (e.g. equity) and not susceptible to commonly accepted definition, much less measurement. Another reason is that there is little agreement about either the inescapable trade-off between competing objectives or the effects of particular policy changes upon their realization. For example, there is disagreement even, or especially, among disinterested analysts concerning the real trade-off, if any, between reductions in income/wealth inequality and the rate of economic growth. Similarly, despite mountains of research, there is disagreement about the ultimate incidence of most taxes and therefore about the effects of, say, the corporate income tax on saving/investment and the distribution of income. The third and probably more profound reason for the lack of consensus arises because many, though not all, of the interests of individuals are in fundamental conflict. Frequently, "my gain is your loss," and conversely. The pursuit of self-interest entails not only buying cheap and selling dear in market transactions; it also leads individuals to engage in political activities of seemingly infinite variety in the expectation of gaining additional net

benefits for themselves, if need be at the expense of others.

Most government policies have effects, intended or otherwise, on the distribution of income and wealth. As just stated, many are zero-sum games. Even when they are positive-sum games and increase the size of the pie, the "appropriate" interpersonal distribution of the increment in income/wealth is in question. Who should win and who should lose, and how should the seemingly costless increment in income and wealth be distributed? These, of course, are normative issues.

In an attempt to make their discipline "value-free," economists have relied on the concept of "Pareto optimality." The allocation of resources is defined as efficient (Pareto optimal) when, and only when, it is impossible to make one or more individuals better off *without* making someone else worse off. Government policies that increase efficiency are assumed to command universal acceptance. This involves the further assumption that the tastes and preferences of individuals are independent: "my degree of satisfaction is unaffected by your consumption." There is, in this hypothetical world, neither jealousy nor empathy. Welfare economics – the branch of the discipline concerned with allocative efficiency – is restricted, therefore, to positive-sum games. To put the same matter somewhat differently, allocative efficiency takes, as given, the existing distribution of income and wealth and does not concern itself with the allocation of the net gain resulting from any increase in efficiency.

But suppose that many individuals believe that governments should seek to reduce interpersonal disparities in the distribution of income and wealth. Clearly, this is a zero-sum game: income and wealth cannot be redistributed unless there are losers and winners. It is *conceivable* that such a government objective would command universal support. Thus losers might endorse it either because they obtained more satisfaction from living in a more egalitarian society than they lost through reduced personal consumption or they might endorse some reduction in income/wealth inequality as the price of minimizing the likelihood of revolutionary changes that would be even more damaging to their interests. While, however, unanimity of view on such a policy is conceivable, it is certainly implausible.

Most government policies are coercive to at least a minority of the electors if one defines a policy to be coercive when it does not command universal support. The words "at least a minority" are used advisedly. General elections are not referenda. The voter can only choose among the alternative bundles of actual or potential policies offered by the competing political parties. A newly elected majority government can, because of party discipline, enact legislation and/or make policy choices that would be endorsed by only a small minority of voters and yet not be disliked enough by the vast majority to fracture party discipline or significantly affect the outcome of the next election.

Bergson's concept of the "social welfare function" [Bergson (1938), p. 310] has been used by economic theorists to incorporate government objectives into their analyses. The social welfare function is a statement, in abstract (symbolic) terms, of those things which "the community" values and of the relative weights, also represented abstractly, that the community attaches to them. Assuming that one knows all the potential policy instruments *and* the effects of each instrument on each of the objectives, it is then a straightforward exercise in the calculus to derive the marginal conditions necessary for maximization of the satisfaction of "the community." By this construct, economic theorists can analyse at the most abstract level the consequences of, say, a hypothetical redistributive income/wealth policy in a non-normative manner. The concept effectively serves to separate the domain of theoretical economic analysis from the political process. The government's objectives are X_1, X_2 . . . and each is assigned a weight: a_1, a_2 . . . a_n. Therefore: $W = f(a_1 X_1 + a_2 X_2 + \ldots a_n X_n)$. The social welfare function is a concept that sidesteps the problem of achieving a social ordering of policy objectives from a combination of individual orderings – a problem that Kenneth Arrow [1951] has shown to be insoluble through voting procedures, except under extremely stringent (and probably rare) conditions.

This approach to the role of government and the selection of policy instruments is completely general and therefore completely empty from a policy point of view except for elucidating the marginal equalities that must be realized in order to achieve the goal of maximizing efficiency in a static world with complete information.

The approach of the non-Marxian economist to the role of government can therefore be summarized as follows:

a/ Market imperfections, by definition, reduce economic allocative efficiency and cause a shortfall from Pareto optimality. It is assumed that governments should intervene to correct these imperfections and thereby achieve net gains in the flow of goods and services that satisfy human wants. How these mini-showers of manna are to be distributed is not within the purview of economics.

b/ The "community" can be assumed to have a set of weighted objectives including, possibly but not necessarily, a reduction in income/wealth inequalities or some other income/wealth distribution objectives. Given the "technical" trade-offs among the objectives, the weights assigned to each objective, and the effects of changes in each instrument on each objective (taking into account that most instruments affect more than one objective and have interactive effects), each policy instrument should be deployed so that the welfare of the "community" is optimized. Whether "the community" means a unanimity decision rule or majority rule that acts as though it embodied "the State" is not specified. In short, the imperative role of government from the point of view of the economist is the correction of market failures. When governments decide to pursue other roles, and in particular to bring about changes in the distribution of income and wealth, the economist *qua* economist would enjoin the decision maker(s) to do so in such a manner that the desired result would be obtained at the least cost (if any) in terms of the lesser realization of other objectives. This is hardly a startling conclusion. It reflects the fact, however, that the role of government as a redistributor of income/wealth, involving, as it must, normative (political) considerations, is outside the purview of professional economics except for positive analyses of the allocative efficiency implications of such policies.

The point that must be emphasized is that, aside from pure public goods' and, in particular, the maintenance of property rights by the State, government intervention has almost always been *rationalized* by economists in terms of the need to correct a market imperfection. In principle, the reduction by government of a market imperfection reduces a source of inefficiency and thereby results in a *net* increase in the output of valued goods and services after losers (if any) from the policy are compensated. As indicated earlier in the discussion of Pareto optimality, economists *assume* that such an intervention would command universal support. In fact, of course, most policies that purport to reduce a market imperfection are highly controversial. They are not accepted unanimously. Indeed, many of them, if dealt with on a referendum basis, might not command majority support. They are pushed through the legislative process by a majority government as one of the seemingly trivial items in the package of policies that becomes a part of its "record" in the next election. No doubt the failure to command unanimous support may be explained in part by the fact that the losers under such policies are seldom compensated, although in principle there would be a net benefit *after* such compensation. But it would be a mistake to suppose that the failure to compensate the losers fully was an oversight or could be explained solely by some kind of technical problem of identifying the losers or the amounts of their losses. The fact is that the policy rewards some and hurts others and may not produce even a hypothetical net benefit. Many observers [Trebilcock et al., (1978); and Peltzman, Posner, McAvoy, Stigler, and Wilson, cited therein] have stated, however, that in their view the concomitant income/wealth distribution effects were the "real" motivation of much government intervention, done under the guise of correcting market imperfections. In other words, the need to correct what would seem to be a market imperfection often provides a guise for redistributing income/wealth and is introduced in response to the pressure exerted by a concentrated interest group that the government of the day believes must receive some net benefit. The failure to reward such a group would reduce, directly or indirectly, the likelihood of re-election, as it is perceived.

It matters not whether one considers conflict resolution as one of the principal roles of government or as a necessary concomitant of government's property rights/resource allocation/income and wealth distribution roles. The reality is that the policy-making process necessarily involves the perpetual resolution of conflicting interests. Indeed, the very structure and processes of government reflect the adversarial nature of collective decision making. At least until recently, traditional economics, by focusing on voluntary exchange in private markets and by assuming unanimity with respect to the search for Pareto optimality, and/or by assuming the existence of a social welfare function, has been able to turn a blind eye to the existence of conflict. The analysis of the decision-making process by which conflict is resolved has therefore been conveniently sidestepped. Because the fundamental tenet of this paper is that the choice of policy instrument is not simply an efficiency issue but rather an inherent aspect of the resolution of conflicting interests, some understanding of the process and of the principal actors in that process is essential. The balance of this chapter provides one possible approach to the conceptualization of the process.

The Basic Framework

Formally, each government decision is a manifestation of the exercise of the authority vested in the incumbent of an office in an organization. The authority is derived from a statute(s) enacted by the legislature within its constitutional jurisdiction. Although adherence to these formalities is crucial to the maintenance of the rule of law, we are concerned

in this study with a prior decision: given that a government seeks to realize some objective, including the objective of re-election, on what basis does it decide to proceed by one particular instrument route rather than by others that are often also technically feasible? In order to approach this question it is essential to look within that complex abstraction called "the government." We must identify the roles of the principal actors in the decision-making process; the rules, both formal and informal, under which they play their parts; and the goals they pursue both because of the requirements of their particular roles (offices) and because they are individuals seeking to maximize their self-interest.[2] Furthermore, we must consider the quantity and quality of information available to the various players, upon which their decisions are based. Delineation of these dimensions of the decision-making process will assist us in seeing the problem of policy instrument choice from the perspectives of those involved in resolving conflicts. For an earlier discussion and references pertaining to the basic framework, see Hartle [1979], p. 59.

It is important to note that our concern is with the numerous perspectives of different kinds of decision makers. Under a parliamentary system, when the government of the day has a majority and, as is usually the case, can strictly enforce party discipline, the Prime Minister is formally the ultimate decision maker in the choice of policy instruments. But here, too, the formalism obscures the full richness of the situation. Seldom does the Prime Minister make critical decisions unilaterally. Most are reached collectively by the cabinet with varying degrees of consensus. Furthermore, such decisions reflect the prior decisions of a host of individuals playing a wide range of roles: the decisions of interest groups to press for and against certain courses of action; the decisions of the media in their coverage of the issue; the decisions of the bureaucrats who develop proposals for ministerial consideration; the perceived attitudes of marginal voters; and many more. In addition, the final decisions with respect to instrument choice are greatly affected by anticipation of their impact on the subsequent decisions of a multitude of individuals, including those identified above.

The process of government decision making, which, as we have said, is essentially a process of conflict resolution, can best be understood when viewed as the interaction or interplay of four distinct, serious, perpetual "games" – games that have unique rules of player selection; rules of play; and rules, again explicit and implicit, governing rewards and punishments. It cannot be emphasized too strongly that the word "game" is used in its technical sense to denote strategic behaviour under uncertainty. The interplay among the winners in each of the separate games, which ultimately determines government decisions, is itself governed by a set of "suprarules" that constrain the conflict and "legitimize" the outcome. "Legitimize" in this context means that the resulting decisions are accepted as being, in some sense, fairly reached. "Due process" has prevailed. The result is that the losers acquiesce in their losses to the extent of refraining from violence or other illegal acts, perhaps because they cannot persuade others to join them in their dissent.

The following games can be usefully differentiated: the special interest group game, the political game, the bureaucratic game, and the media game. The voters are, of course, vitally important, primarily because they can choose the players in the political game. For our purpose, however, voters, other than those who are engaged in *organized* special interest group activities (political parties excluded), are treated as non-players in the decision-making game. This is not to say that they are disinterested spectators. Analytically, however, it seems best to think of them as "clients" or "buyers" choosing from among the competing political candidates and/or parties those whom they expect will further their own self-interest the most or hurt it the least.

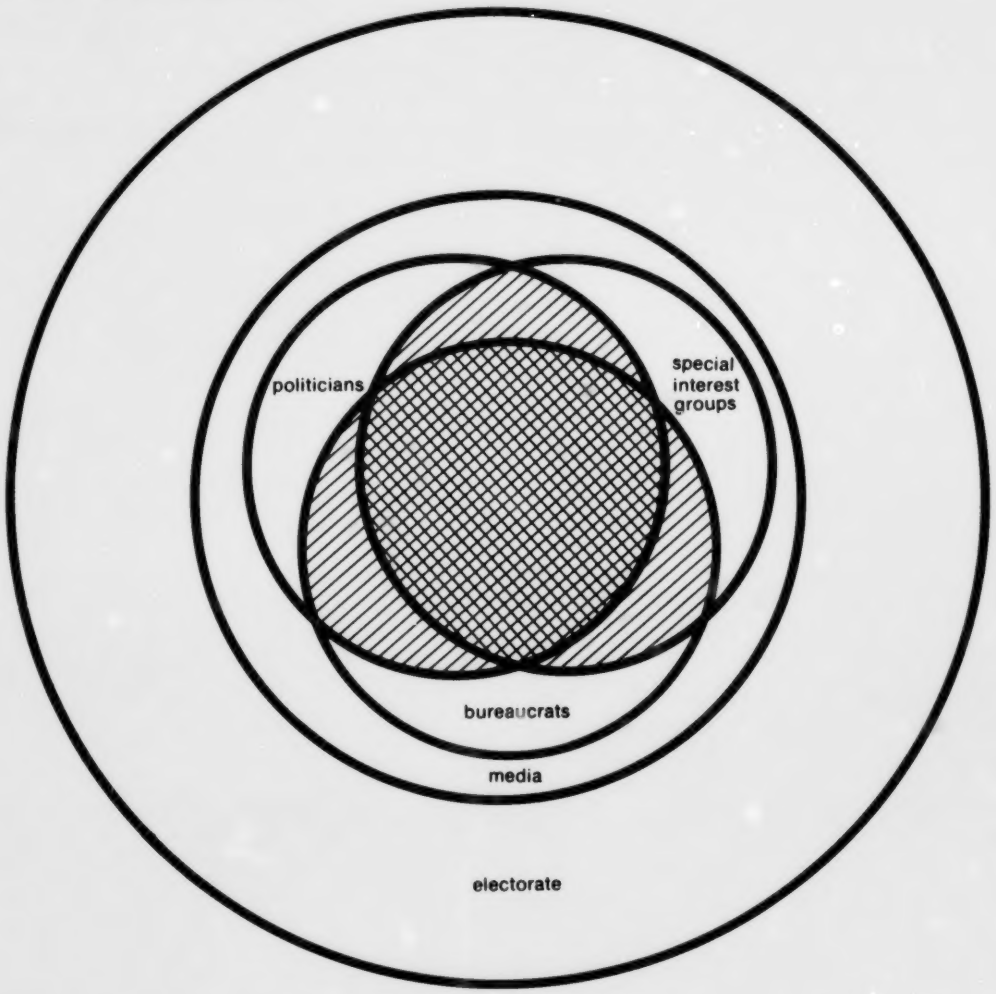
The decision-making system is structured in such a way that it is in the self-interest of the principal actors in the special interest group and political games to pursue the interests of those whom they represent and/or those whom they would like to represent. The contending actors hold or seek to hold proxies for the various conflicting interests of the groups of individuals that constitute our society. The right conferred on individuals in a democratic society to vote for the person (party/leader) whom they wish to be represented by is, in a sense, a public good: one person's exercise of the right does not diminish the right of another. And qualified voters cannot be excluded from the exercise of the right.

The following simple diagram (Fig. 2-1) will perhaps assist the reader in envisaging the relationship among the several games.

The double cross-hatched intersection of the political, bureaucratic, and interest group games represents the heart of the decision-making process. But the diagram also shows in the single cross-hatched areas the interplays between each pair. And each of them interacts with the media: it is through the media that the electorate perceives each of the games and the interaction both between and among them. Indeed, the players in each game often per-

Figure 2-1

The Four Interrelated Games



ceive what is happening in their own game, not to mention the other games, through the media.

The "Special-Interest-Group" Game

Each of us has a whole host of interests related to our ethnic background, sex, age, health, family status, religious affiliation, geographic location, education, occupation, employment status, holdings of marketable assets, and many other factors. Some are tangible, such as our bodies; others are intangible, such as our reputation. Some, like our physical or cultural environment, we share with others. Others, like offices and jobs, we hold exclusively. To assert, therefore, that individuals have a multitude of interests is simply to assert that they possess a multitude of different kinds of property rights in things that are sources of satisfaction ("utility") either directly (e.g. the shelter of one's own house) or indirectly (e.g. the

rental income from a house, used to purchase food). Not only are the kinds of "things" of enormous variety, but also the size and composition of the portfolio of these things held by individuals differ dramatically.

The interests of individuals are increased or diminished in two ways: first, they are subject to windfall gains and losses, including initial endowments of all kinds; second, by consuming more or less (including leisure) and thereby decreasing saving/investment or increasing saving/investment, individuals can act to change the size of their holdings of property rights. For the most part, conventional economics has concerned itself either with investments in market assets or in human capital that give rise to a flow of marketable personal services. For the most part also, the analysis has proceeded on the assumption that the rules (institutional framework) remain constant. Our concern, however, is the investment of time, effort, money, and payments in kind by individuals and groups made for the purpose of influencing government decisions. Inducing a government to change the rules, or to exercise its discretion in a favourable manner under those rules, can have a most substantial effect on the property-rights holdings of individuals and groups. If a person can induce the civic authorities to rezone his/her property from residential to commercial, he/she may thereby greatly increase its market value. The enhanced value of the property represents a return to that person on the investment of time and/or money in obtaining the zoning changes that is just as real as the return on, say, the time and money spent on producing widgets. The same is true of the investment in a host of other changes in the rules or favourable decisions made by those granted the right to exercise discretion under the rules [Hartle (1979), p. 49].

This is straightforward enough when independent individuals invest their own time and money to obtain favourable rulings for themselves; however, groups of persons with similar interests can often exert greater influence when they act in concert as an organization. An individual seeking a favourable zoning change from the civic authorities would probably find his proposal countered by a neighbourhood property owners' association that would be anxious to prevent a possible deterioration in the property values of its members should a commercial undertaking be situated in their hitherto exclusively residential neighbourhood. By the same token, pressure for a favourable tax change exerted by the Canadian Metal Mining Association, with several thousand members, would almost certainly be more effective than the pressure that any single mining company could exert. Furthermore, a single mining company would be reluctant to invest a large sum to obtain a tax change that would ultimately benefit many other firms at no cost to the latter.

Two questions arise in considering the role of organized special interest groups: Under what conditions do they form and survive, and how do they exert their influence? These two closely interrelated questions are explored briefly in reverse order.

Essentially, organized interest groups seek to advance the mutual interests of their members in one or more of the following ways, and often simultaneously:

1 They stimulate voter action for or against a particular policy change through the media – for example, through public demonstrations and conferences reported by the media, the issuance of press releases to the media, and advertising placed in the media. Obviously the idea is to influence voters' preferences so that the competing political parties will alter their policies in an attempt to secure electoral support.

2 They provide additional information (perhaps with a high degree of bias) to the decision makers – usually ministers and bureaucrats – in the hope that they will be influenced in their decisions in a direction favourable to the group. Information can be transmitted orally by a delegation or more likely through a brief presented to a ministry or bureaucrat by a delegation.

3 Reciprocity may be offered to politicians and/or bureaucrats in exchange for a favourable decision or the dropping of threats to withdraw something the group presently enjoys. The group may offer to deliver a significant block of votes, plant favourable stories in the media, or make campaign contributions in cash or kind.

4 They participate in regulatory proceedings. The group may, for example, hire staff or buy the legal, accounting, or consulting services necessary to intervene by way of submissions to, or appearances before, regulatory bodies. These phenomena are, to a degree, an aspect of all legal proceedings.

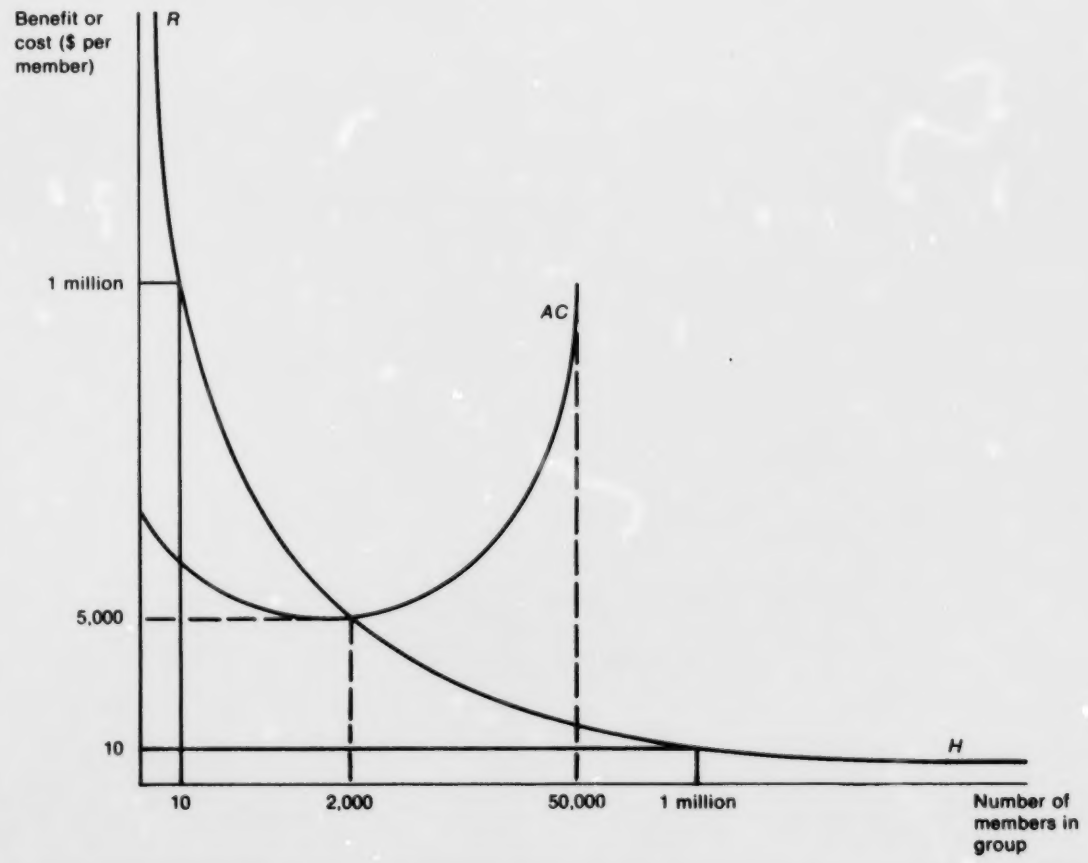
All of these means of exerting influence have one thing in common; all involve the expenditure of time and/or money usually termed "transaction costs." These costs may be relatively trivial; for example, one or two individuals may take a minister to dinner and provide him with information already available to them but not to the minister. Other means, such as an advertising campaign, could cost millions of dollars. It is the magnitude of these transaction costs per association member relative to the anticipated benefit per member from the successful exercise of

pressure that determines when interest-group organizations are formed, which answers the first of the two questions posed earlier [Berry, 1978].

A simple diagram, Fig. 2-2, is used to explain what is involved. For the sake of simplicity, assume that a policy change is entirely distributional in its effects; that is to say, assume that the *sum* of the amounts gained by one group is equal to the *sum* of the losses borne by another group (the zero sum game). Assume further that the amount involved is $10 million and that there are ten members in the winning group and one million members in the losing group. Because the area under a rectangular hyperbola is by definition a constant, we can draw a curve *RH* in Fig. 2-2 (not to scale) that depicts the relationship between group size and the amount of gain or loss per member of each of the two groups when the total amount ($10 million) for each group is identical. A second curve *AC* is shown on the diagram. This depicts the average transaction cost per member for a hypothetical, all-purpose, perfectly effective, pressure group organization. Note that the average cost is U-shaped. This reflects the assumption that there is an optimal size of organization. A group of optimal size is depicted. (In fact there are probably few, if any, competitive forces that would bring this about.) In the diagram, the optimum is 2,000 members, where the cost per member is $5,000.

Figure 2-2

A Simplified Illustration of the "Free-Rider" Problem



As depicted, the winning group of ten will have no difficulty in banding together to press government for a favourable decision. The investment cost per member is much less than the anticipated benefit per member; i.e. the *RH* curve is much above the *AC* curve when only ten persons are involved. By the same token, under these assumptions the losers have no hope of organizing, because the average cost of applying pressure to prevent the unfavourable decision (*AC*) is above the average benefit (cost avoided) per member (*RH*) for any group larger than 2,000. With our hypothetical policy change there would be, as previously assumed, one million losers.

Why is the optimal size of organization assumed to be relatively small? The answer lies in the "free-rider" problem.[3] While some costs are fixed regardless of the number of members [Peltzman (1976), p. 211], which indeed would lead to falling average costs, the difficulty in inducing individuals to pay their share of the costs of applying pressure rises extremely rapidly. (In the diagram we have assumed that they are infinitely high when the number of persons in the group reaches 50,000.) Even if there were a political net benefit for each individual in a group with a similar interest, it makes sense for such an individual *not* to contribute if he thinks his contribution will not affect the outcome. When the group is small and the members contiguous, such "free riders" can be identified, and moral suasion and social sanctions can be applied. The free-rider problem can be controlled at low cost; however, the more the size and/or geographic dispersion of the potential membership increases, the less effective the methods of control. In order to gain and retain its members, it may become necessary for the association to provide them with some kind of *quid pro quo* over and above the pursuit of the pressure activity that is its principal purpose [Olson (1965 and 1971), p. 60]. Social events, such as "fun" conventions held in exotic places, which are only open to paying members, provide an example. Organizing these kinds of events increases the organization's costs, as does the production of newsletters, and so on, which are essentially membership solicitations.

There is no reason to believe that the pressure exerted on decision makers by special interest groups, either directly or indirectly, is in any sense balanced or fair or offsetting. Indeed, interests that are of enormous importance in aggregate, such as the common interest in water quality, are usually so widely shared that the free-rider problem makes it extremely difficult to organize and sustain an effective pressure group to protect it. Those who are dumping toxic chemicals into the water are, however, few in number and well aware of the benefits they derive from using the waters in that way. Consequently they can organize effectively and spend large sums pressing government for the maintenance of the status quo. Those pressing governments to protect such common property rights are usually volunteers, with budgets based on a few, often non-tax-deductible, contributions. Needless to say, when governments want to defuse or emasculate such groups they can set up time-consuming and costly processes and proceedings. These appear to give the two sides an equal opportunity to voice their views. The polluters can, and do, pay high fees to professionals to carry on the fight on their behalf; the volunteers, for the most part, soon run out of patience and money, however.

"One man, one vote" is a fundamental precept of any democratic system. Does the existence of a multitude of special interest groups that seek to influence policy decisions directly or indirectly by changing voter preferences or by influencing the decisions of elected representatives not negate, at least in part, the democratic tenet cited? One important school of American political science, the so-called "pluralists," have argued that these groups are essentially countervailing: the struggle among them, so goes the argument, only serves to educate the electorate and the legislators. The result, it is asserted, is that the quality of policy decisions is improved. We, like Theodore Lowi [1969 and 1979; 1979, p. 314; and 1972, p. 299] and other critics, believe the pluralist argument, or doctrine, to be essentially inadequate, as the discussion above would suggest. While the hordes of organized interest groups are usually in some kind of dynamic equilibrium as the result of mutual accommodation, some extremely important common interests are seriously underrepresented for the reasons we have sketched.

The Political Game

The actors in the political game are well known: elected members of the legislature, of whom the Prime Minister or Premier and the cabinet ministers who head the executive are the most important; aspirants to office, of whom individuals who have been nominated by a political party to run as its candidates in a forthcoming election are the most important; and members of political parties, of whom those elected to party office are the most important.

It would take us too far afield to discuss the role of political parties. They have much in common with the special interest groups, in functional terms, but are a great deal more complex with respect to both purpose and means. Perhaps for our purposes political parties might best be looked upon as loose coalitions of individuals who are prepared to work together for

the election of a slate of candidates. Presumably the members believe that if the party they support were to form the government their personal interests would be better served than if some other coalition were in office. These interests are at times very personal (e.g. appointment to a public office), at times narrow but not exclusive (e.g. policy decisions favouring a particular industry), at times completely general (e.g. support of a particular defence posture). Because the party seeks to appeal to the widest spectrum of the electorate, the party itself must try to accommodate (reconcile) the widest possible range of inherently conflicting interests among its own members. Formally, it is at the party membership level that the conflict resolution process should begin – a process that would gradually ascend to the final cabinet decision process.[4]

Although parties seek to accommodate as many interests as possible, they must also distinguish themselves from competing parties. This is largely achieved, as with brand-name consumer products, by packaging and advertising. The party label comes to be identified in the eyes of the electorate with a kind of guarantee of basic policy quality. To be slightly more precise, the hope is that the party label will come to be associated with a consistent *approach* to *all* policy questions that is appealing to most voters. To some, the rationale for supporting one approach rather than another is ideological – morally right. To others it is pragmatic – it usually "furthers my interests." From the party's point of view, either rationale is perfectly acceptable.

Candidates are nominated by the riding associations of each political party. In some parties this nomination process is largely *pro forma*: the candidate has already been chosen by the party organization at some other level. In others it is easily and frequently manipulated by the party hopeful with the biggest war chest, whether from his personal wealth or from funds provided by supporters for reasons ranging from venal to virtuous. In still others the process is reasonably democratic.

At the time of an election each candidate is, in a sense, acting as a franchised agent selling the *full* line of policies – the platform – offered by the party. He is also assisted or inhibited by the voters' perceptions of both the party's record (if any) and the quality of its leader. Although the platform is nominally based on resolutions reached at earlier party conventions, for the most part it is designed by the leader and his coterie of advisers, party officials, and a few elected party members. The platform is frequently altered during the course of a campaign in response to the moves of other parties and the perceived reactions of the electorate, as reflected in private party polls. It is vitally important to recognize that the typical voter, when deciding for whom to cast his ballot, is faced with choosing between two or more enormously complicated bundles of prospective policies. Most parties, if pressed, will claim to have "a policy" on every conceivable issue. Most are vague and only a few are specific. Some policies the voter may care about intensively; others he may regard with indifference. And how likely is it that a certain promised policy will be implemented? Given these complexities and uncertainties, it is hardly surprising that the majority of the electorate appear to cast their ballots on the basis of one or two specific issues (e.g. a proposed additional excise tax on gasoline) or on a party label ("I always vote Liberal") or on the perceived qualities of the party leader ("he looks like a twirp" or "he's so arrogant").

Throughout this study it is assumed that maximizing the likelihood of their election or re-election is the proximate objective of politicians. Whether electoral success is wanted for its own sake or as a means to an end is left unstated and no doubt differs from individual to individual, just as it is also affected by circumstances and time. And there can be broad, altruistic ends as well as narrow, materialistic ends. This is considered again briefly at the end of the chapter.

Being elected, of course, is a necessary, but certainly not sufficient, step in a politician's career. Most probably aspire to leadership; and there are few, if any, who do not aspire to cabinet office. Hardly any achieve the first goal, and few realize the second. Achieving preferment within the party requires: keeping the party members in one's own riding happy enough that one can count on their wholehearted support in the next election; at least appearing to be trying to serve the multitude of the often conflicting interests of one's own constituents; appearing to be loyal, hard-working, and adept in pursuing the interests of the party as a whole; and building up one's own image and reputation in the media in order to differentiate oneself in a positive way from one's competition within the party. None of this is easily done from the backbenches, where party discipline is rigidly enforced. It is particularly difficult for those opposition members not appointed to the "shadow cabinet." Some of the penalties for what would seem to be failure include: lack of renomination just before a coming election; defeat at the polls because riding supporters are listless or constituents are unimpressed; denial of party campaign funding and other kinds of electoral support; and an inability to deliver partronage.

Just as the riding association has served the candidate's purpose when the candidate is elected,

so does a backbencher of the party in power serve his purpose by unquestioningly voting with the ministry (i.e. his party). Weekly caucus meetings of the party's elected members are, for the most part, relatively unimportant, particularly when the ministry has a clear majority. It cannot be emphasized too strongly that under a Parliamentary system a newly elected majority government has enormous power. What the cabinet decides, the party's backbenchers almost invariably support. The Senate can do little more than slightly delay. The Governor General's concurrence seems to have become constitutionally automatic (although there was an exception in Australia in the late 1970s). What the cabinet decides soon becomes the law of the land. One can imagine, of course, cabinet decisions that would be sufficiently outlandish as to cause party discipline to collapse. And there certainly are constitutional and common law limits on the cabinet's powers. Nevertheless the range of choice within these constraints is undoubtedly vast. The principal effective constraints are the likely effects on the electorate's voting choices in the subsequent election – an election that could be as far away as five years – or the opposition of the provinces. Apparently most voters have short memories (i.e. about four to six months) for most political decisions.

Ideally, the members of the cabinet should collectively reflect, in microcosm, the conflicting interests of the electorate both with respect to subject matter (e.g. business, labour, environmentalists, the aged) and intensity (e.g. the relatively strong bargaining power of farmers). Ideally, too, the ministers should push the multitude of interests they represent as vigorously as possible, with the important proviso that under the direction of the Prime Minister (assisted by the central agency ministers to be described later) resolution of those interests is achieved over time in a succession of policy decisions that will appeal to the largest number of marginal voters in marginal ridings. To put the matter a little differently, the series of compromises should *appear* to those affected to be such that no competing party could produce one that would *appear* to be better to those groups that count. Because the political future of cabinet members individually is dependent to a large extent upon the success of the ministry as a whole (we ignore here the stratagems of those seeking to displace the leader), they accept the role of the PM as a mediator and conciliator who can, and will, force decisions within a time period of his choosing, deciding unilaterally if necessary. If they do not accept the PM's decisions gracefully and appear to support them wholeheartedly in public, he has the authority to remove or demote them to a less prestigious portfolio. Needless to say, either move is likely to alienate the interest group(s) that the particular minister was thought to represent on his appointment.

Although most ministers are expected to push the special interests of their departments (and others too, such as those of a region), the so-called "central agency" ministers are required to pursue the interests of the ministry as a collectivity. In the Government of Canada the two principal central agencies,[5] leaving aside the Privy Council (Cabinet) office itself, are the Department of Finance and the Treasury Board. The Minister of Finance is responsible for taxation and borrowing. Thus he, in effect, exercises the greatest influence on the Government's *total* spending. He is also responsible, among other things, for policies related to changes in the foreign exchange rate, in collaboration with the Bank of Canada. The President of the Treasury Board, who is supported by a Secretariat and the Office of the Comptroller General, is responsible for the development of the expenditure budget (within the limits established by Finance), personnel management, financial management, and program evaluation, to mention only the most important areas.

There are other ministers who also serve the collective interest of the Government, on the whole, with the ministers of Justice and External Affairs being the most important and those responsible for providing common services (e.g. purchasing, construction, and accommodation) being the least important. In 1977 the Trudeau government created a Board of Economic Development Ministers (BEDM), with a President and a Secretariat. The President was a kind of "super minister" responsible for co-ordinating a group of programs that have as their ostensible purpose the management of economic development. Because many of these programs were the responsibility of other ministries (e.g. Industry Trade and Commerce, Regional Economic Expansion, and Transport) the minister responsible for BEDM was expected to play a co-ordinating role not unlike that of the Prime Minister, albeit on a reduced scale and certainly much subordinate to the PM. Following the May 1979 election the Clark government maintained this structure and extended the concept to the field of social policy. The Trudeau administration, returned to power on February 18, 1980, has, not surprisingly, continued in the same direction.

The creation of these super ministries and super ministers was accomplished to some extent by a transfer of responsibilities from the Minister of Finance and the President of the Treasury Board, and their respective bureaucratic agencies. But the transfer was not complete; nor is it likely to be so in

the near future. Therefore, this new structure probably represents a move towards greater centralization of authority at the expense of the special interest ministers (e.g. agriculture, labour, and health). The most likely explanation of this change is that with the massive increase in government involvement in more and more aspects of our lives the interrelatedness of policies (responsibilities) has grown exponentially. Policies frequently offset each other or, at best, do not complement one another. To some extent this was accidental; the side effects of some policies were unknown or ignored.

Indeed, one of our main themes is that political parties compete for the electoral support of marginal voters in marginal ridings in the pursuit of electoral victory – *the* objective of the political game. In order to accomplish this goal, a party must be perceived to offer to the crucial voters more for less than its competitors. This can be done by coercing other voters, particularly committed (infra-marginal) voters of any stripe, by providing them with less for more. A more subtle approach is possible. Like magicians who take advantage of the perceptual limitations of their audiences, the best politicians can make it appear that benefits can be drawn from empty top hats, and costs can be made to disappear into thin air – or at least be sawed in half.

The Bureaucratic Game

The executive of the Canadian government consists of the cabinet and the public service (bureaucracy). The bureaucracy performs the following functions: provides policy advice, exercises delegated ministerial authority, negotiates within ministerially determined ranges, and administers government programs. As with any other occupation, the members of the bureaucracy are, to a considerable extent, self-selected. Those who place great weight on job security and/or want to influence policy are more likely to apply for positions than those dedicated to maximizing their incomes. Similarly, *other things being equal*, professionals who are willing to sacrifice some income for the prospective satisfaction of "changing the world" are more likely to apply for public service positions than their confreres. But whatever their motivations for entering the public service, one can best predict their subsequent behaviour by assuming that they will pursue promotion (increasing policy influence) within the system. This will entail, as in any occupation, behaving in a manner that is consistent with the explicit and implicit incentive system that, at least in some respects, differs from the formal system and certainly from the rhetorical system.

Although the reward for "appropriate" behaviour is promotion (merit pay increases are relatively trivial), it is also vitally important to recognize that the punishment for "inappropriate" behaviour is, with rare exceptions, non-promotion rather than demotion or dismissal. That is a perverse result of the application of a laudable principle. Up until 1917 all civil service appointments were "as pleasure." The result was that each time the party in power changed, political patronage dictated that most of the civil service incumbents be changed also. The introduction of the merit principle as the basis for appointment, meaning by competition, also meant that demotion or dismissal except "for cause" was ruled out. Moreover, "cause" was defined narrowly, and elaborate appeal procedures were established. In the event, proving "cause" can become so time-consuming and potentially embarrassing to a superior that, except in cases of redundancy (which, perhaps surprisingly, is not easily proven) and gross misconduct, the degree of job security in the public service is extraordinarily high. Although the burden on the taxpayer of retaining incompetent or lazy public servants is not zero and the effect on the morale of others is not trivial, the most serious burden is the time and effort required by the competent and ambitious to "work around" the deadwood in order to get on with the job.

What has just been said results from the application of the law: the *Public Service Employment Act, 1966-67* [1970]. In practice, however, it also applies, again with the rarest exceptions, to those holding positions "at pleasure." Tradition, which probably originated in expediency, dictates that when the PM wishes, for some reason, to rid himself of an incumbent in a particular office, that person must be offered an innocuous office, nominally at the same level, as a haven. Unwanted deputy ministers mysteriously become consuls general in American cities or members of little-known boards or commissions. Furthermore, when the party in power changed in 1957 and in 1979 there were no dismissals of senior officials in the first instance, although there were some resignations, and only two – albeit extremely important ones – in the second.

New governments, particularly when they have been out of office for such long periods, are utterly dependent upon the incumbent senior officials at the outset. By the time they have become knowledgeable enough to make changes, they have also learned that, for the most part, senior federal bureaucrats are not overly partisan. They have also learned that there is, and must be, a high degree of interdependence and mutual trust between each minister and his senior officials. To be specific about a complex and

subtle matter: the bureaucrat must not attempt to play the role of the minister; but he must anticipate what the minister needs to pursue his political ambitions and act in such a way as to assist the minister in being successful in his own game.

Conversely, to obtain such dedication and loyalty, the minister must anticipate what the deputy head needs to pursue his bureaucratic ambitions and act in such a way as to make the bureaucrat successful in his own game. There develops, in other words, a kind of exchange or reciprocity that is based on mutual trust. There are, of course, some important constraints. First, gross improprieties on either side cannot, or at least should not, be countenanced. Second, both the minister and the official have obligations to the PM. The official should not, or perhaps must dare not, support his minister in any venture that would be detrimental to the PM. Nor should the official, except *in extremis*, deal with the PM directly without the approval of his minister.

The minister's objective is to be re-elected as a member of the party with the largest number of seats, to remain a member of the cabinet, and to advance to the most prestigious cabinet offices up to, and sometimes including, the leadership of the party and the prime ministership. As we have emphasized before, for all but a few ministers (those responsible for the pursuit of the common interests of the government), this entails successfully pressing the interests of the department for which he is responsible. It is here that the interest of the minister and the senior official coincide. For the deputy head to be successful he must satisfy his minister *and* his subordinates upon whom he depends. And these subordinates are only satisfied when the interests of the department are successfully advanced. As the department grows in size or responsibility, or both, the opportunities for promotion for those employed there grow correspondingly, because additional positions are created and/or existing positions are reclassified at higher levels. The latter is preferable to the former from the point of view of the deputy head. To attract and retain "the best and the brightest," a department must appear to offer superior promotional prospects.

Moreover, expansion facilitates "burying" those who are neither the best nor the brightest – deadwood that cannot be pruned for the reasons given. For the minister to shine, his department must shine, in the sense of responding quickly with "answers" to publicly perceived problems or opportunities. For the department to shine, the deputy must have promotional inducements to offer those upon whom he depends. For departments with operational responsibilities, "growth" usually means expansion of the scope of complexity of the task. For departments with more policy content, "growth" usually means capturing the lead responsiblity for devising solutions to perceived problems. Particularly in the latter case, promotions follow because of the apparent need to have more professionals and at more senior levels. In a very real sense, the minister can only win his game by helping his deputy. And this applies equally to the deputy vis-à-vis his subordinates. Expansion in either of the dimensions just described, at least relative to other departments, is the watchword [Breton and Wintrobe, 1979].

The situation that prevails in the so-called central agencies is significantly different. Leaving aside the stabilization, tax structure, and debt management responsibilities of the Department of Finance, for the most part these agencies are co-ordinators and controllers, not policy innovators. They tend to expand because of the increasing burden created by ever expanding government intervention, because of the competition for jurisdictional authority among agencies, and because of the increasing sophistication of the arguments for more intervention and expansion originating in line departments. Because the relationship among ministers is inherently adversarial, they also compete for the most able deputies, and the deputies compete particularly for the most able staff (as distinct from line) support. This brings about a process of "self-levitation" across the system that has to be matched by the ministers and agencies at the centre. For the most part, this is a reluctant expansion. When central agencies compete for jurisdiction among themselves, however, the self-levitation process also occurs.

An important feature of the bureaucracy is the vital importance of information. Knowledge is power, and ignorance is impotence. At every level, success is critically dependent upon correctly assessing or anticipating the attitudes and actions of others, either to be able to assist them or thwart them. Because strategic behaviour is rife in the pursuit of departmental/personal advantages, a knowledge of the ever changing alliances frequently makes the difference between success and failure. Favourable reputations, upon which promotion ultimately hinges, can be manufactured by false advertising just as they can be destroyed by false rumour. Because insider information is so valuable, it is usually exchanged and not given away. There are, therefore, insider information networks. Those who play according to the implicit rules of this bureaucratic game (which ultimately means defending *the system* as a whole when threatened) slowly gain access to such a network when they prove they can be trusted. These networks are also hierarchical. Disloyalty to the system is punished by exclusion from such networks, with

devastating results for the offender's subsequent performance. It is simply impossible to function effectively at the senior levels without a knowledge of what is "really" going on in the system. For this reason alone, senior officials spend a great deal of time on the telephone, over lunch, and at so-called "parties."

Special interest groups and officials with policy advisory responsibilities usually have a symbiotic relationship. The officials often need the information that only the group possesses. The special interest groups attempt to persuade the officials of the reasonableness of their case in the expectation that this will have a favourable effect on the policy advice the officials put forward. Needless to say, the information supplied is frequently biased and the arguments partly discounted. But few generalizations can be offered.

As far as the media are concerned, for the most part bureaucrats are, like everyone else, heavily dependent upon the media for information. In Ottawa few know what to think before reading the *Globe and Mail* in the morning. Usually they are extremely reluctant to supply information, however, other than the stereotyped press releases and interviews that are a mixture of fact, rationalization, and Government propaganda. On occasion, however, senior bureaucrats do provide insider information on a "not for attribution basis" to "reliable" journalists. The *quid pro quo* for the bureaucrat is less critical comment by the journalist, who would otherwise lose his source of information; "inside" information supplied by the journalist; media support for the department's policy ideas; or positive personal propaganda.

The Media Game

The media play a vital role in the decision-making process, which is frequently underestimated by those not actively engaged in it. To an important extent, journalists (to use the term in the widest possible sense) define the problems to which the competing political parties must respond. Similarly, they describe and interpret those responses to the electorate and can thus significantly affect electoral outcomes. To a remarkable degree, "reality" for all of us is what television, radio, newspapers, magazines, books, and film say it is. In a campaign, reality is the "clip" on the 6:00 p.m. or 11:00 p.m. TV news. Certainly, it is the politician's reality, in the sense that the electorate's perception of them and their actions is at least as important as who they "really" are and what they are "really" doing.

It is true, of course, that there are an infinite number of "realities" that can be found in the media where freedom of expression prevails. The "reality" of the *Globe and Mail* is markedly different from that of the *Toronto Sun*. In the instances where both cover the same event, the "facts" may well be the same, but the interpretations are likely to be markedly different. Perhaps what is more striking, however, is the disparity between the two with respect to the selection of the events to be reported and the relative importance that these two newspapers attach to them. The same can be said, however, about, let us say, a trade newspaper (or periodical) vis-à-vis the *Globe and Mail*. Little of the information carried by the former will appear in the latter for the obvious reason that only the relatively small group in the particular trade are interested in the details of their business. This situation is even more striking with respect to books, periodicals, and films; it is probably less so with respect to television and radio.

There is not, in short, a market for information in general any more than there is a market for food in general. Neither of these are homogeneous goods. Rather there are an untold number of markets, each with its own clientele and suppliers. Just as with food, each individual takes some of this and some of that kind of information and combines it all, within his budget, to provide a diet satisfying to his own perceived needs and tastes. Because acquiring and assimilating information is costly in time, money, and effort, and because all resources have to be budgeted, the individual must perforce be highly selective. Using rules of thumb and scanning techniques based on training and experience, individuals narrowly restrict their intake of information. The result is that even the most knowledgeable citizens have enormous gaps in their awareness and understanding of "reality." The decisions of all of us are, therefore, based on what Herbert Simon [1955, p. 99] called "bounded rationality."

By definition, the vast majority of individuals obtain virtually all of their current information from the mass media (we ignore conversation and observation). Leaving aside the few nonprofit enterprises, the profitability of particular suppliers of information hinges crucially on their volume of sales or number of viewers/listeners [McFadden et al., forthcoming]. This results because their principal, or only, source of revenue is the sale of advertising. The revenue depends upon the rates charged, which, in turn, reflect the size and nature of the potential market reached by the newspaper, periodical, or broadcast. It is in the interest of each supplier of information to differentiate its product in order to increase its market share. Too much differentiation would obviously have the opposite effect, for the market would become too narrow because of "undue" specialization. This does

not preclude the existence of profitable, smaller-audience publications or radio stations that reach particular markets to which some advertisers especially wish to appeal; the latter are therefore willing to pay higher rates (per 100) for that access. Nevertheless, the information conveyed in these segments of the media is rarely the stuff that shifts the party preferences of a significant number of marginal voters in marginal ridings. In what follows we shall ignore these highly specialized media. It should be noted, however, that it is not only possible but common for at least three levels of information on the same subject to exist at the same time.

Suppose, for example, that a particular, relatively small industry is pressing for tax relief in the form of a higher rate of write-off for corporate tax purposes on a type of equipment unique to the industry. There will be private communication among the industry leaders, and between them and the government; there may also be, at the same time, extended articles on the topic in the trade magazine; there may be a brief news item in the mass-circulation newspaper, reporting a speech by the trade association chairman. Were the concession to be granted, the same degree of emphasis would be accorded to it at each of the three levels. The immediate beneficiaries would be well aware of the triumph; other taxpayers, however, would likely be unaware of the cost they will have to bear.

The objectives of media management is straightforward: profit maximization. The objective of most journalists, one might assume, is maximum public recognition: through by-lines, columns, talk shows, and so on. Such journalists can command higher income and "perks" from competing managements in the mass media – managements that can use such journalists to attract more readers, viewers, and listeners. As a consequence, the incentive system in journalism is such that the profession implicitly penalizes those members who specialize in covering complex policy issues. Investment in time and effort is high, but the payoff is small because the audience is small.

Columnist Geoffrey Stevens, in a *Globe and Mail* article [February 23, 1980] quotes with approbation a candidate, Marcel Massé, who stated, just prior to the election of February 18, 1980, that "I've always been a constituency guy, but there's no room for me now." Stevens went on to comment:

> Most M.P.'s won't admit this. They like to think they got elected by dint of hard work or personal appeal. The backroom boys, however, say that the national party, its policies and its organization count for nearly half of a candidate's support and the leadership or the image of leadership also counts for close to half . . . . A typical candidate is worth between three and five per cent – no more . . . .

After discussing the distorted images of the two principal leaders conveyed to the public in the election, he said:

> It would be bootless to blame the public for not seeing through the distorted images of the leaders. The responsibility starts with the mass media. The media may not have invented the images, but they nurtured and fed them . . . . Television is the chief villain. It is the most compelling, believable media and the most superficial. Television is the perfect vehicle for reinforcing images . . . . Television is a terrible vehicle for contradicting conventional wisdom, for revealing how a politician really thinks and what he really believes . . . .

The columnist then discussed, among other things, the common misapprehension that what is seen with one's own eyes on TV is true while that which one reads may be misleading.

The article by Stevens has been quoted at length because he makes several points that we believe to be of great significance. First, particularly since the advent of television, the particular qualities of *local* candidates for the competing parties are of little importance. A vote for a particular candidate is usually a proxy vote for a particular leader and/or party and/or set of national policies. The different images of the party leaders may be as important, or more important, than the differences in the policies for which they purportedly stand; although the medium perhaps is not the message, as Marshall McLuhan would have it, certainly visual media convey some kinds of messages better than others. The comparative presentation and analysis of the policies of the competing political parties is poorly communicated on TV. Given that most of the population spend much more of their time watching TV than reading even a newspaper, it is hardly surprising that to the limited extent that the voting decisions of marginal voters are determined by party policy differences, these are, for the most part, based on a few issues that have been grossly and often misleadingly simplified.

The situation lends itself to another relationship – a relationship that is sometimes symbiotic and sometimes antithetic. The mass-media journalist works under an incentive system that greatly rewards the revelation of the sensational and the trivial, together with the soothing confirmation of well-established prior belief. Complexities, ambiguity, generality, paradox, and uncertainty, although painfully prevalent in the real world, must be suppressed or perhaps converted by art or artifice into simplicity, clarity, specificity, answerability, and certainty. The vast majority of viewers/listeners/readers want all things

on their information menu to be black or white, true or false, good or bad – preferably seasoned with a pinch of sensationalism and intimate personal detail of the famous, and served on a platter of conventional belief. The successful journalist must take the raw ingredients – the issues of, and the actors in, the policy decision process – and by chopping, grinding, mashing, blending, baking, boiling, and frying, convert them into attractive food for the average palate. This pleases the patrons, and that pleases the media owner.

The policy maker is, therefore, faced with the sad fact that his words and actions are often hopelessly misconstrued or distorted. Some "good" policy options may have to be rejected simply because they could never be explained to most voters. They would "look bad." Conversely, "bad" policy options may have to be adopted because they would "look good."

Politicians are quick to assert that the rejection by the public of a particular policy (or government) is, or was, the result of a "misunderstanding," when often the fact is that the public understood it all too well. There seems little doubt, however, that misunderstandings or, perhaps more accurately, incomplete understandings do occur because many journalists are not fully informed themselves or do not have the skill, or will, to convey the information to a reluctant market. The inexorable demand for copy on a vast array of topics by a fixed hour, six days a week, is hardly conducive to in-depth research, much less reflection, by mass media journalists. This phenomenom, coupled with the sensationalism and trivialization to which we have referred, means that policy makers are, to some extent, forced by the media to submit to "irrational" constraints, and are sometimes subjected to criticisms that are founded on ignorance or misleading information that, in an ideal world, would be dispelled or corrected by the media. This raises a question that is as important as it is imponderable. To what extent are the weaknesses of the media capable of amelioration, and to what extent do they simply reflect the limitations of their various audiences?

The other side of the coin is that the mass media can be exploited at times by politicians and special interest groups. By "exploit" we mean they can take advantage of the limited time and other resources that journalists have at their disposal for any given news item.

Lazy or overworked journalists are prone to accept press releases, "handouts," and canned stories at face value and submit them to their employers without cross-checking or critical assessment. Venal journalists can be made more sympathetic by lavish entertainment or gifts or overly generous moonlighting contracts. Vain journalists can be flattered and their critical faculties dulled. Important and controversial policy decisions can be buried in complex amendments to complex statutes or, even better, in the regulations. "To get to the bottom" of the issue might require of the journalist much more time, effort, or expense than he can devote to it because of other demands. Moreover, such investments are highly speculative: with all the relevant information at hand, there may be no story, or the story may be of such limited interest that it would be pointless to submit it. Similarly, the government may announce a particular policy that sounds eminently sensible, even appealing, that is duly reported. But it is a rare journalist that later seeks to discover what was actually implemented and what were the *ultimate effects*, unless, of course, he is given some lead.

The reasons for the lack of follow-up are obvious: the opportunity costs are high and the pay-off highly uncertain. Nevertheless, the politician can take advantage of these phenomena and thereby create the illusion of problem solving. In other words, politicans can "dupe" the electorate by exploiting the limitations of the media that, to some indeterminate degree, are reflections of the nature of human perception and motivation. Because of the competition among the political parties, if one party finds it expedient in its pursuit of electoral success to try to exploit these limitations, the other parties have no alternative but to follow suit or expose it. Casual observation would suggest that political parties believe that positive policy alternatives usually attract more marginal voters than criticism of opponents, except when they are in opposition.

Some Concluding Observations

1 If one considers the decision to adopt a particular policy instrument in lieu of possible substitutes, it can perhaps best be considered as a particular resolution of many conflicting interests. It must be emphasized that any decision is only one in an endless sequence of such decisions; it reflects the compromises that went before and has implications for the compromises that will follow. With a majority government, the cabinet is actively aware of the necessity of gradually evolving a balanced bundle of policies over the three-to-five year period preceding the coming election.

2 The decision-making process is replete with unwritten and often unspoken contracts. *A* assists *B* on the understanding that *B* will, perhaps at some later date, reciprocate in kind. Consequently, and obviously, those who have nothing of value to offer (or withhold or take away) have no influence on the

outcome. These exchanges exist within each game, between pairs of games, and even among all four of them. One result is that, except when external shocks occur such as a massive increase in the world price of oil, the system is in a peculiar kind of dynamic equilibrium. That is to say, each interest is accommodated roughly in accordance with its relative bargaining power.

3 To a not inconsiderable extent mutual accommodation is achieved by taking advantage of the inherent barriers to the organization of interest groups created by the "free-rider" problem. Whatever the total cost of bestowing a benefit on a group that needs to be accommodated, countervailing pressure can be diffused if the costs are spread widely and hence thinly.

4 The ignorance and perceptual limitations of individuals, except with respect to their own specific interests (as they believe them to be), coupled with the mass media imperative to satisfy the demand for simple answers to complex questions, can be used to advantage in the accommodation process. For those not "in the know" on a particular issue, the size and distribution of the real costs and benefits that will result from a policy decision are unknown. Frequently voters seem to be satisfied with illusionary benefits and not antagonized by real though indirect ("hidden") costs.

The interrelated games perspective of the decision-making process presented in this chapter emphasizes the pursuit of self-interest by individual actors. The particular courses of action that individuals must follow, in order to further their own interests, depends primarily on the rules (incentive structure) that prevail in their particular game and the perceived adequacy of their performance in conformity with those rules. It is probably obvious, but perhaps it should be emphasized that the various kinds of actors will seek to maximize *economic* efficiency when, and only when, it is consistent with maximizing their own interests.

By assuming, as we do, that individuals seek to maximize their self-interest we are implicitly assuming that they make rational decisions. This in turn implies that they deploy their *own* resources efficiently. Thus a minister might use up some of his limited bargaining power in pressing for a more economically efficient policy if he thought that this would increase his chances of re-election more than pressing for some alternative version of the policy. The same holds for bureaucrats: if achieving greater economic efficiency is a means to more rapid promotion, then the economic efficiency objective will be pursued, if need be, at the expense of other objectives. For both ministers and officials, however, the goal of economic efficiency has relevance only to the extent that the system rewards those whose policy decisions or advice result in greater efficiency – or are perceived to do so.

The assumption of traditional economics that collective decision makers do seek, or should seek, the most efficient allocation of the nation's resources is based on the prior assumptions that the incentive system applicable to the various kinds of actors are either consistent with the single-minded pursuit of that goal or should be consistent with it. The views of some economists on the related issue of whether or not policy makers will choose the most efficient means to realize a given objective is discussed in the next chapter.

Perhaps, in concluding this chapter, a few words should be added concerning the self-interest postulate that underlies it. Many find the notion that individuals always seek their self-interest repulsive; it accords neither with their own feelings about themselves nor with the perceived, sometimes seemingly altruistic, behaviour of others.

There would appear to be two rather disparate ways of looking at this matter. Most economists would probably argue that, while only a crude generalization and hence not valid in all circumstances and at all times, no other single behavioural postulate has as much predictive power. One may not like the postulate, but it works better than any alternative: so goes this line of argument. It is important to recognize that the economist does not try to define the term "self-interest." Fundamentally, all that is said is this: given a choice, rational men will, most of the time, choose the alternative that is expected to yield the most satisfaction (utility) or the least dissatisfaction.

To some extent the objection to this formulation can be overcome by a definition of the term self-interest that encompasses aspects of altruism. Self-interest can be defined *tautologically* to encompass such dimensions of individual satisfaction as those derived from the good regard of others (prestige) and the satisfaction derived from the good regard of self (personal pride). Quite conceivably, indeed most probably, the search for prestige and/or self-esteem involves sacrificing narrow, material self-interest. In short, self-interest is not necessarily the same thing as selfishness, as that term is usually understood.

The problem with this formulation, which seems to accord with much personal experience and observation, is that there is no *objective* way by which the mix of tangible (materialistic) and intangible (prestige and pride) sources of satisfaction can be discerned in particular cases. In short, one cannot *disprove* the assertion that a particular individual in particular

circumstances is motivated by, say, materialistic concerns.

The assumption that politicians seek to maximize the likelihood of their re-election does not preclude the possibility that they would use the power gained for some altruistic purpose, as seen by others. Perhaps for some the satisfaction is in the victory itself; for others, the satisfaction may be in the opportunity to do things that will engender personal prestige by pleasing others or self-esteem by living up to the dictates of one's conscience. Because electoral success is the necessary precondition for achieving any or all of these things, the assumption of vote maximization by politicians made in this study can be looked upon as normatively neutral.

It might be stated in passing, however, that the tendency until recently to ignore the incentive systems applicable to collective decision makers is perhaps attributable to the trifurcation of the original subject of political economy into the relatively isolated disciplines of economics, political science, and public administration. The institutional setting within which collective decisions are made was considered by many economists as outside their discipline. Another plausible explanation is that by adopting the simplifying assumption of perfect information it was reasonable to assume that the electorate would not countenance collective decisions that were inefficient in either of the senses just mentioned. The next chapter emphasizes the quite different implications that follow when the perfect information assumption is relaxed.

3 The Choice of Governing Instrument: The Calculus of Decision

Our analysis of the collective decision making process in Chapter 2 attempts to contrast the traditional conception of the role of the State in economic analysis with explanations of State action anchored in an analysis of the incentive structures of the key classes of political actors. According to Peltzman [1976, pp. 211-12], economic analysis has conceived the role of the State "as a *deus ex machina* which eliminated one or another unfortunate allocative consequence of market failure." He continues:

> The creeping recognition that regulation seemed seldom to actually work this way, and that it may have even engendered more resource misallocation than it cured, forced attention to the influence which the regulatory powers of the State could have on the distribution of wealth as well as on allocative efficiency. Since the political process does not usually provide the dichotomous treatment of resource allocation and wealth distribution so beloved by welfare economists, it was an easy step to seek explanation for the failure of the traditional analysis to predict the allocative effects of regulation in the dominance of political pressure for redistribution on the regulatory process . . . . The essential commodity being transacted in the political market is a transfer of wealth, with constituents on the demand side and their political representatives on the supply side. Viewed in this way, the market here, as elsewhere, will distribute more of the good to those whose effective demand is highest.

Peltzman attributes this "revisionism" on the part of economists, at least with respect to the role of regulation, to Stigler's article [1971, p. 3]. Intellectual progenitors in economics, however, include Olson [1965], Buchanan and Tullock [1962], and Downs [1957]. A similar intellectual tradition has much longer antecedence in political theory, where writers such as Bentley in early years of this century [1908], his disciple Truman [1951], and more recently Dahl and Lindblom [1953], Dahl [1956], Schubert [1960], Wildavsky [1964], and Lindblom [1965 and 1968] have all emphasized the essentially pluralistic nature of North American society and the critical importance of interactions among interest groups in shaping the policy outcomes in such a society.

Economics has been compelled to confront the logic of its own behavioural postulates. If parties to private market transactions are for the most part to be presumed to be rational actors attempting to maximize their self-interest, whether in the form of increased profits or increased utility, then at least two important, albeit obvious, implications are likely to follow from this with respect to collective behaviour. First, many, and perhaps most, people are unlikely to have any *ex ante* preference for market allocation of resources over collective allocation of resources, but presumably they choose to invest resources in pursuing economic self-interest through either market activity or political activity, depending on where their net gains are likely to be the greater [Trebilcock et al., 1978]. Second, just as with private markets whose functioning is presumed to be dominated by self-interest, so in political "markets" one should assume that the relevant actors – voters (demanders), politicians (suppliers), bureaucrats, and the media – tend to be motivated principally by self-interest. While the policy outcomes that are likely to result from the interaction of these various interests may be by no means clear, what is clear is that the political process is unlikely to be dominated by an overwhelming commitment to the promotion of allocative efficiency or the restriction of collective decision making to redressing failures in private markets, as economists might define such failures. While competition in private markets may often, by an "invisible hand," be led fortuitously to the maximization of the value of social resources, competition among self-interested actors in political "markets" implies no such by-product function, given the possibilities of coercion embraced by the principle of majority rule. Collective decisions reached under such a rule imply no necessary constraints of real or perceived mutuality of advantage [Trebilcock et al., 1978].

Thus economists have gradually come to recognize that the role of the State in a modern representative democracy is centrally concerned with mediating interest group conflicts over distributive claims. Such a recognition has induced a measure of modesty

about what economics, as an intellectual discipline, can contribute in determining appropriate policy objectives for the State.

With this retreat on the relevance of economics to the shaping of the policy goals of the State well advanced economists have more recently begun to make another point. While conceding that any of a number of possible policy goals may be adopted by government, it is argued that, at the very least, everybody's interests would be served by governments choosing the most efficient instrument available as the means by which any policy objective in question is to be effectuated. This might be termed a concept of technical, as opposed to allocative, efficiency. The argument, in short, is that whatever the policy objective (even an openly redistributive objective), it ought to be achieved at the lowest social cost.

On its face, this seems an attractive decision principle for guiding the selection of instruments of intervention. In the next two sections of this chapter, we proceed to state and evaluate this principle in detail; then, later in the chapter, we develop an alternative hypothesis for describing rational instrument choice in our model of the political process.

Technical Efficiency and Instrument Choice: The Thesis Stated

The argument by economists that technical efficiency is the relevant criterion for determining instrument choice has been made in both positive and normative terms. In both cases the concept of technical efficiency in this context seems to embrace two classes of social costs. First, different instruments are likely to generate different kinds of administrative (transaction) costs associated with their use. Monitoring and enforcement costs will be entailed for the government; compliance costs, for the private sector. Second, different instruments, in attaining a specified objective, are likely to generate different incentive structures for affected parties, which in turn will have different effects on the amount of social resources expended in attaining the objective.

A Positive Theory of Technical Efficiency

A positive argument for technical efficiency in instrument choice has been made by Gary Becker [1958]. He argues [p. 105] that there is relatively little to choose between an ideal free enterprise system and an ideal political democracy; both are efficient and responsive to the preferences of the electorate: "In an ideally competitive free enterprise system, only the most efficient firms survive; for example, if the level of a firm's costs were independent of output and varied from firm to firm, only the firm with the lowest costs would survive. Similarly, in an ideal democracy only the most efficient parties would survive; if the costs incurred by the state in operating an industry were independent of output and dependent on the party in office, only the party with the lowest costs could remain in office. An industry would be operated equally efficiently by the state and by the market place if the most efficient party had the same costs as the most efficient firm [p. 107]."[1] In other words, in this ideal state of the world, both firms and political parties would face similar incentives to provide the goods or policies demanded at least cost. To the extent that this is not being done, a firm faces an unexploited margin of profit; a political party, an unexploited margin of political advantage. Becker goes on to note that neither the free enterprise system nor the political system in the real world is free from imperfection. In the case of the political system, he argues that ignorance on the part of voters and the large scale required of political organizations are the two most potent forces producing monopoly and other imperfections [p. 109].

In a note published almost twenty years after the previous comment, Becker [1976, p. 245] is prepared to assume away, to a large extent, the impact of these imperfections on the political process and to argue that *in fact* there will be a tendency in the political system towards the selection of the most efficient instrument available. Drawing on the thrust of recent literature in macro-economics on the theory of rational expectations [for surveys, see Kantor (1979), p. 1422; and Willes (1980), p. 81], Becker argues that it is difficult to believe that most voters are systematically fooled about the effects of policies like quotas and tariffs that have persisted for a long time: "I prefer instead to assume that voters have unbiased expectations, at least of policies that have persisted. They may overestimate the dead weight loss from some policies and underestimate it from others, but on the average they have a correct perception . . . . In the interest of brevity and a more forceful presentation of the argument to follow, I make an even stronger assumption; namely that voters perceive correctly the gains and losses from all policies" [pp. 246-47]. Becker concludes that "the methods used to accomplish any given end tend to be the most efficient available, in the public as well as the market sector . . . . Although this approach leaves little room for economists to suggest improved methods in the public sector, it gives them potentially a much enhanced role in the positive analysis of the laws of operation of this sector" [p. 248].

It is not clear where Becker's more recent argument, that voters are not systematically fooled about the effects of policies, leaves him with respect to his earlier view that, absent imperfections such as ignorance, there is little choice between an ideal free enterprise system and an ideal political democracy. Having later repudiated one of the major forms of political imperfection that he identified in the earlier comment – i.e. voter ignorance – Becker would seem to be left with a somewhat weaker case, in his own terms, for preferring market to political processes in terms of their efficiency effects.

Somewhat related to Becker's argument that policy makers will in fact choose instruments of intervention that are the most technically efficient available is a view argued by Doern and Wilson [1974], derived from some earlier theorizing by Lowi [1964, p. 677; 1970, p. 314; and 1972, p. 299]:

> This hypothesis would suggest that politicians (especially the collective Cabinet) have a strong tendency to respond to policy issues (any issue) by moving successively from the *least coercive* governing instruments to the *most coercive*. Thus, they tend to respond first in the least coercive fashion by creating a study or by creating a new or reorganized unit of government, or merely by uttering a broad statement of intent. The next least coercive governing instrument would be to use a distributive spending approach in which the resources could be handed out to various constituencies in such a way that the least attention is given as to which taxpayers' pockets the resources are being drawn from. At the more coercive end of the continuum of governing instruments would be a larger redistributive program in which the resources would be more visibly extracted from the more advantaged classes and redistributed to the less advantaged classes. Also at the more coercive end of the governing continuum would be direct regulation in which the sanctions or threat of sanctions would have to be directly applied. It is, or course, obvious that once a policy issue has matured and has been on the public agenda for many years, all or most of the basic instruments could be utilized [Lowi, p. 339].

The Doern-Wilson hypothesis that politicians will move successfully from the least coercive to the most coercive instruments is deficient in at least two respects. First, what is meant by coercion is not clearly stated. The most straightforward meaning would simply be an unwanted (or involuntary) cost. With coercion so defined, the Doern-Wilson hypothesis closely resembles Becker's theory of instrument choice. A second deficiency lies in the lack of explanation of the factors that drive politicians along the coercion continuum in their choice of instruments.

A Normative Theory of Technical Efficiency

A normative argument for technical efficiency as the determinant of instrument choice has been developed by several economic commentators in recent writings. For example, Stephen Breyer, in an article in the *Harvard Law Review* [1979, p. 549], argues, in contrast to the later views of Becker, that policy makers frequently invoke instruments of intervention, in pursuit of policy objectives, that are not the most technically efficient instruments available. He argues, for example, that in the case of natural monopoly, often activities that are not inherently a part of a firm's natural monopoly are swept into cost-of-service rate making. He argues that in the case of attempts by the State to capture economic rents there is too often resort to suppressing the price mechanism rather than taxing excessive profits or to complete deregulation. He argues that in the case of the spill-overs from productive activities, as in the case of pollution, policy makers resort too frequently to crude across-the-board standards rather than taxes or other market-based incentive systems such as tradeable pollution rights. He argues that in cases of "excessive" or destructive competition policy makers too frequently resort to entry and pricing restrictions rather than rely on anti-trust statutes to prevent predatory behaviour. In the case of inadequate information (for example, about product hazards), he argues that policy makers too often resort to standard setting rather than disclosure regulation.

Breyer [p. 586] suggests several general principles that should govern the matching of regulatory instruments with regulatory objectives:

> First, regulation should aim at worst cases, and in attacking such cases regulators should seek simple rules. Efforts to cure every minor defect, to close every conceivable loophole, are ultimately counter-productive.
>
> Second, regulators should rely upon incentives and bargaining when possible to induce more acceptable behaviour. Incentives provide a practical method for reconciling the need for simple regulatory rules with the diversity and complexity of the industrial world. Bargaining provides a practical method for identifying worst cases and obtaining effective cooperation in dealing with them.
>
> Finally, the focus on problems accompanying classical regulation supports the notion of looking at economic regulation through a procompetitive lens and adopting a "least restrictive alternative" approach. The unregulated market should be relied upon in the absence of a significant market defect. Where the harm produced by the unregulated market is serious, one should turn first to incentive-based (tax) or disclosure regulation. Only where that will not work should classical regulatory modes be adopted.

Charles L. Schultze, in a recent monograph [1978, pp. 28-29], argues in a somewhat similar vein:

> Society can go about dealing with market failure in two quite different ways. It can try to isolate the causes of the failure and restore, as nearly as possible, an efficient market process. Or it can put matters completely into governmental hands, supplant the market, and directly determine the outputs it wants. In other words, social intervention can be *process-oriented*, seeking to correct the faulty process, or *output-oriented* seeking to bypass the process and determine outputs directly by regulation or other device.
>
> Neither approach is universally valid. In some circumstances the obstacles to creating a working market process are insuperable. But in many cases, corrective action to create efficient markets is possible. Regardless of the circumstances, however, social intervention has almost always been output-oriented, giving short shrift to the process-oriented alternative. And this has proven a costly bias. It has, with no offsetting gain, forfeited the strategic advantages of market-like arrangements. It has led to ineffective and inefficient solutions to important social problems. It has taxed, well beyond its limit, the ability of government to make complex output decisions. And it has stretched thin the delicate fabric of political consensus by unnecessarily widening the scope of activities it must cover.

In line with his general thesis, Schultze argues, for example, that instead of direct State subsidies to colleges and universities, provision by the State of educational vouchers to individuals would more efficiently meet the intended redistributive goals. Taxes on injuries and taxes on pollution would more efficiently meet the objectives of pollution and injury reduction than command and control forms of regulation. In order to facilitate the choice of more efficient instruments of intervention, Schultze argues that much more generous use should be made of the principle of compensating the losers from the deployment of such instruments. In the absence of a principle of compensation, the resistance of the prospective losers to the adoption of efficient instruments will lead to the substitution of less efficient instruments, which transfers the losses (by definition, greater) elsewhere in the political system.

Given the various advantages that both Breyer and Schultze identify for less restrictive, more strongly incentive-based, forms of regulatory intervention (where intervention is justified at all), the challenge raised by the rational expectations theorists must be met: why would rational, self-interested politicians leave opportunities for realizing these benefits, and the political returns therefrom, unexploited? Breyer does not attempt to answer this question. Schultze [p. 83] identifies two sets of factors in explaining "inefficient" forms of government intervention:

> First, our political traditions place a high premium on preventing the government itself from imposing direct harm on individuals. We have typically accomplished this objective by carefully specifying the rights and duties of both government and individuals, and providing liberal opportunities for individual adjudicatory procedures. The application of these principles to areas of complex social intervention almost always results in attempts to specify outcomes directly through a combination of detailed regulation and judicial interpretation of particular cases. The "blind-to-equity" operation of an incentive system is seen by legislators as antithetical to traditional principles. Second, the roundabout and indirect process by which the price system determines outcomes is not well understood, and on the surface seems much less certain of achieving results than does the direct specification of outputs. The uncertainty about market-like approaches is probably heightened by a lack of professional attention to the very real transition problems that would accompany the deliberate creation of markets that never existed before.

This explanation is not wholly convincing, turning as it does on the persistence of outmoded historical traditions, political ignorance, and professional inattention. Why would such irrationality persist if the social (and political) gains from dispelling it are as high as Schultze asserts?

Technical Efficiency and Instrument Choice: The Thesis Evaluated

The Means-Ends Relationship

The technical efficiency thesis appears to be predicated upon a particular notion of the means-ends relationship. As Lindblom [1959] describes this view, "decision-making is ordinarily formalized as a means-ends relationship: means are conceived to be evaluated and chosen in the light of ends finally selected independently of and prior to the choice of means" [p. 83]. Breyer's approach to the question of choice of regulatory instrument exemplifies this view. Breyer [1979, p. 550] states that his framework "is built upon a single axiom for creating and implementing any programme: determine one's objectives, examine the alternative methods of obtaining those objectives, and choose the best method for doing so." It will be recalled from our earlier discussion of Breyer's analysis that he defines the best method as the least restrictive alternative. There are a number of difficulties with this view of the means-ends relationship in policy making.

First, it assumes a dichotomy between means and ends that in many cases is nonexistent. It is true that often in political discourse such things as reducing inflation, reducing unemployment, increasing economic growth, reducing the trade deficit, reducing

juvenile delinquency, reducing poverty, reducing highway congestion, are described as policy "objectives" (ends) for which "means" must be selected for their effectuation. These so-called objectives or ends, however, are themselves the means to more final objectives. In other words, reducing inflation is not an end in itself, but a means to achieving some more ultimate end. In our analysis, more ultimate ends of these stated "ends" would relate to the interest of politicians in securing their election or re-election. It is, of course, true that one can also ask what is the objective sought by the politician in securing election or re-election? Why does he want to be elected or re-elected? If the answer to this question is that he seeks to exercise power and influence over others, one can again ask, "to what end?" Thus the process of translating objectives or ends into more ultimate objectives or ends involves an almost infinite regress. As Simon [1976, p. 63] describes this process, "the fact that goals may be dependent for their force on other more distant ends leads to the arrangement of these goals in a hierarchy – each level to be considered as an end relative to the levels above it. Through the hierarchical structure of ends, behaviour attains integration and consistency, for each member of a set of behavioural alternatives is then weighed in terms of a comprehensive scale of values – the 'ultimate' ends."

While it is artificial to assume that the ultimate objectives of politicians are election or re-election, this avoids the problem of infinite regress by not attempting to identify ends beyond this, recognizing that these more ultimate ends can only be achieved if the prior end of securing election or re-election is attained. All so-called means-ends relationships that occur prior to this intermediate end will be weighed against this end. Thus both the determination of policy "objectives," in the conventional sense, and the determination of the means by which those objectives are to be pursued will be weighed against the calculus of how they serve the end of enhancing the prospects of the election or re-election by the political decision makers. Technical efficiency, *per se*, will not be a relevant criterion of interest choice; only if in some way it advances this end for the politicians will it enter the calculus of decision.

It might be argued that the behavioural postulates that we have attributed to politicians are deficient in that they depict politicians as essentially passive agents reacting uncritically to the whims of, but not attempting to shape the goals of, the electorate. We acknowledge that there is room for political leadership – in effect, for politicians who attempt to change, rather than simply cater to, voter preferences. Like preachers, proselytizers, and psychotherapists, politicians clearly have some ability to propagandize the electorate on behalf of personal and initially unshared beliefs. The scope for successful pursuit of this kind of strategy in the political arena, however, seems likely to be relatively limited. First, it seems likely that more political resources are required to attempt to change voters' preferences than are required simply to communicate an attempt to respond to them. Apart from the higher costs faced by political messiahs, voters also face higher costs in attempting to evaluate the merits of abandoning one set of preferences and adopting another. Given political competition, we would assume the existence of incentives to minimize both sets of costs. Thus, attempting to change, rather than respond to, voter preferences, at least where firmly formed, is likely to prove to be generally a politically inefficient, high-risk strategy. This is likely to be less true where voter preferences are weakly formed, incoherent, or difficult to ascertain. Here there is clearly more room for politicians to promote personal preferences and to shape public preferences [for further discussions on this subject, see Heclo (1976), Chap. 6; McClosky (1960), p. 406, and (1964), p. 361; Miller and Stokes (1963), p. 45; and Luttbeg (1968)]. Moreover, whether politicians are predominantly influenced by voter's preferences, interest group preferences, or personal preferences, may in part be a function of the point in time in the political cycle when decisions are being made [Nordhaus (1975), p. 160].

The Interdependence of Instruments and Objectives

A second difficulty raised by the means-ends relationship implicit in the technical efficiency thesis is the assumption that once a policy objective has been specified, the choice of instrument is a valuationally neutral exercise. If this were so, one could probably agree that generally in choosing an instrument to effectuate a given objective, one should choose an instrument that uses fewer rather than more resources. This assumes, however, that the alternative instruments implicate no other policy objectives. If what we understand here by objectives is values or interests espoused by politically significant groups of voters, then any instrument that advances a policy objective (a), no matter how efficiently, while at the same time impairing a policy objective (b), will not necessarily be consistent with the end of the policy-making process, as we have defined that end – i.e. vote maximization. In the real world, few policy instruments are so circumscribed in their effects that a choice from among them simply boils down to the question of which one involves the least resources in

the attainment of a given policy objective. Consider the following hypothetical case [see Hartle (1979), pp. 188-89]: A government has only three goals, A, B, and C, and only three alternative policy instruments, identified by the numbers 1 through 3. With each goal there is associated a statistical series. The changes in these statistical series are taken as measures of the changes in the degree to which the particular goal is realized. These statistical series are not commensurate; for example, one series might measure per capita income, while another might measure the crime rate.

Let us assume that the hypothetical government has adopted policies 1, 2, and 3 with the intention of furthering the degree to which goals A, B, and C, respectively, would be realized. An evaluation of these policies, in terms of the changes they have brought about in the past values of the statistical series relative to what they would otherwise have been, has yielded the results displayed in the table below. Favourable effects are shown as positive signs, and conversely.

		Impact on goals		
		A	B	C
Intended effects:				
Policy	1	+		
	2		+	
	3			+
Unintended effects:				
Policy	1	N/A	+	+
	2	-	N/A	-
	3	-	+	N/A

These hypothetical results would suggest that each policy had the intended favourable effect on "its" goals. But the unintended effects of the three policies on the "other" goals in some instances offset, and in others complemented, these intended effects. For example, all of the effects of policy 1 were favourable; the two unintended effects of policy 2 were unfavourable; and one of the unintended effects of policy 3 was favourable while the other was unfavourable.

Three points can be made on the basis of this simple example.

1 The distinction between intended and unintended effects is immaterial when it comes to the evaluation of policies; the effects are what they are.

2 It is impossible for the analyst to determine, on the basis of the information given, whether policy 2, which had one positive effect and two negative effects, made a net positive contribution to the realization of the government's goals. Even if the magnitudes of these effects were known, because the goals are incommensurate it is impossible to determine objectively whether the favourable effects are "worth" the unfavourable effects.

3 When all of the government's goals are included in the analysis, the costs of more fully realizing a particular goal through the use of one or more policies are the unfavourable effects they have on other goals. By definition, the mix of policies is not optimal when costless gains in goal attainment can be had by changing these policies. This is rarely the situation. In most instances a hard decision must be made in which more of something desirable can only be achieved at the expense of something else that is also desirable.

Simon [1976, p. 65] uses another example:

> In actual situations a complete separation of means from ends is usually impossible, for the alternative means are not usually valuationally neutral. It is from this difficulty that so many futile arguments arise as to whether "the ends justify the means." In the case of the Prohibition Amendment, for example, the means employed involved so many value questions – questions of personal liberty, proper police methods, etc. – that these soon overshadowed in importance the "ultimate" objective of temperance. Hence it was fallacious to talk of prohibition as merely a means to the highly desirable end of temperance. The particular means used to attain this particular end had many consequences other than the specific end being sought, and these other unsought ends had to be given their proper weight in considering the desirability of the means.

The implications for an analysis of the selection principles determining the choice of governing instrument that flow from the recognition that choosing policy objectives and choosing policy instruments are not separable processes are well traced out by Lindblom [1959, pp. 82-83]:

> The value problem is . . . always a problem of adjustments at a margin. But there is no practicable way to state marginal objectives or values except in terms of particular policies. That one value is preferred to another in one decision situation does not mean that it will be preferred in another decision situation in which it can be had only at great sacrifice of another value. Attempts to rank or order values in general and abstract terms so that they do not shift from decision to decision end up by ignoring the relevant marginal preferences. The significance of this ... point thus goes very far. Even if all administrators had at hand an agreed set of values, objectives, and constraints, their marginal values in actual choice situations would be impossible to formulate.
>
> Unable consequently to formulate the relevant values first and then choose among policies to achieve them,

> administrators must choose directly among alternative policies that offer different marginal combinations of values. Somewhat paradoxically, the only practicable way to disclose one's relevant marginal values even to oneself is to describe the policy one chooses to achieve them. Except roughly and vaguely, I know of no way to describe – or even to understand – what my relative evaluations are for, say freedom and security, speed and accuracy in governmental decisions, or low taxes and better schools than to describe my preferences among specific policy choices that might be made between the alternatives in each of the pairs.
>
> In summary, two aspects of the process by which values are actually handled can be distinguished. The first is clear: evaluation and empirical analysis are intertwined; that is, one chooses among values and among policies at one and the same time. Put a little more elaborately, one simultaneously chooses a policy to attain certain objectives and chooses the objectives themselves. The second aspect is related but distinct: the administrator focuses his attention on marginal or incremental values. Whether he is aware of it or not he does not find general formulations of objectives very helpful and in fact makes specific marginal or incremental comparisons. Two policies, X and Y, confront him. Both promise the same degree of attainment of objectives a, b, c, d, and e. But X promises him somewhat more of f than does Y, while Y promises him somewhat more of g than does X. In choosing between them, he is in fact offered the alternative of a marginal or incremental amount of f at the expense of a marginal or incremental amount of g. The only values that are relevant to his choice are these increments by which the two policies differ; and, when he finally chooses between the two marginal values, he does so by making a choice between policies.

The important insight offered by Lindblom is that it is only in the process of choosing among alternative policy instruments that choices can be made about trade-offs among different policy objectives, whether they be values or interests [see also Schultze (1968), Chap. 3]. In determining simultaneously both objectives and instruments, politicians will be guided by the calculus of vote maximization, which we have assumed drives the political process. The empirical argument developed by Lindblom – that, in the real world, objectives cannot be determined independently of instruments – reinforces our earlier conceptual point as to the false analytical dichotomy between means and ends. It is also important to emphasize that Lindblom's argument holds even in a world of perfect information, where voters are fully informed as to the costs and benefits of alternative policies and where politicians are perfectly informed as to voter preferences and the intensity thereof, as well as to all the possible consequences of all alternative policy choices. In such a world, the process of instrument choice cannot simply involve, in most cases, choice of the least-cost means for the achievement of a single policy objective. The technical efficiency thesis might, of course, be reformulated so as to predict (require) the selection of the policy instrument that in advancing one "objective" (set of interests) does the least damage to other "objectives" (sets of interests). To the extent that damage to other objectives (interests) is unavoidable, however, this may dictate some compromising on the promotion of the first objective (set of interests). This exercise in voter coalition building involves political judgments as to the selection of policies that align the margins of different sets of voter preferences. It is not clear in what sense this exercise can usefully be described as "technical."

Schultze [1978, pp. 89-90], while making the argument that greater weight should be attached to technical efficiency considerations in the choice of governing instruments, acknowledges, as Becker does not, that typically the choice of instrument is as normative as the choice of objective:

> The suggestion that the political debate be confined to ends, while technicians and experts design the means once the ends have been decided, is facile and naive. Ends and means cannot and should not be separated. In the real world they are inextricably joined: we formulate our ends only as we debate the means of satisfying them. No electorate or politician can afford to turn over the crucial question of how social intervention is to be designed to supposedly apolitical experts.

An Alternative Hypothesis: Political Rationality and Instrument Choice

In this part of the chapter, we develop an hypothesis of politically rational instrument choice as an alternative to the technical efficiency thesis.

Legal Constraints on Instrument Choice

Both as a result of International Treaty obligations and as a result of domestic constitutional constraints, governments are often not free to choose the most technically efficient instrument that could be fashioned to promote given policy objectives, as we have defined the terms "objectives" or "ends."

For example, the General Agreement on Tariffs and Trade (GATT) had, until the recent Tokyo round of multilateral trade negotiations, focused primarily on securing a reduction of tariff barriers in international trade. Thus a national government wishing to pursue protectionist policies has been forced to choose among a variety of instruments that created nontariff barriers, such as subsidies to domestic producers, government procurement policies, anti-dumping

legislation, manipulation of customs valuation procedures, imposition of products standards that discriminated against imports, manipulation of foreign exchange rates, and so on. In many cases, these alternative instruments are technically less efficient in securing protectionist ends than explicit tariff barriers, but the latter have been legally foreclosed (by GATT).

Similarly, in a domestic context, while the Canadian Constitution (The *British North America Act*) forbids, in section 121, the imposition by provinces of explicit duties on goods entering a province from another province, various other instruments have been resorted to by provincial governments by way of protecting local interests from competition from out-of-province interests. For example, subsidies, government procurement policies, quotas, product standards, and residence requirements have all been invoked as substitutes for internal tariff barriers [see Trebilcock et al., 1977; Pattison, 1978; and Shirsky and Trebilcock, 1978]. Somewhat similarly, provincial governments on occasion have chosen to pursue policies of public ownership, given that the constitutional division of powers foreclosed an ability to regulate the activity in question. For example, the Alberta government recently acquired Pacific Western Airlines, partly in furtherance of its policy objective of promoting development in the north of the province by providing better access to airline services. Because the regulation of aviation is a matter that falls exclusively within federal jurisdiction under the Constitution, public ownership, albeit arguably less efficient than private sector regulation, was the only policy instrument available to the province, given that regulation as an instrument had been foreclosed.

In all of these cases, we may observe technically inefficient instruments being chosen because technically more efficient instruments have been foreclosed to the level of government in question.

Marginal and Infra-Marginal Voters

In choosing policy instruments, a critical variable for politicians is likely to be the impact of any of the alternative instruments on marginal and infra-marginal voters. Marginal ridings and marginal voters can be defined operationally, albeit crudely. Marginal ridings are those where the party affiliation of the MP or MPP elected in the riding differs from that of his or her predecessor *x* or more times in the previous *y* elections. Once these ridings have been identified (a simple matter except when redistribution of voters has taken place), a scientific survey is carried out in each of them. The survey has two purposes: first, to identify the voters who switched party affiliations in one or more previous elections; second, to determine their characteristics (e.g. age, sex, occupation, marital status, income, ethnic origin, and so on). These are the marginal voters. The next obvious step is to ascertain, again through surveys, the "precise" policy issues to which they attach the most importance. From there it is a relatively short step to the production of an election platform that is most likely to attract their support.

We start from the premise that for any party to form a government it must win a majority, or at least a plurality, of seats in the parliament or legislature. At any given point in time, some voters are strongly committed to one of the political parties. On the other hand, other voters will either be uncommitted or only weakly committed to a particular party. Where a plurality of voters in a riding are committed strongly to one party, they may be ignored in the competition among the parties for votes, except that the party to whom they are committed must refrain from extreme behaviour that would lead its adherents to reconsider their allegiance. Party competition is thus focused on those ridings where there is not a quasi-permanently committed plurality of voters. We shall term these uncommitted ridings "marginal ridings." Within marginal ridings, there is, by definition, a plurality of voters who are not permanently committed to a particular party; these, we call "marginal voters." Electoral success for a political party, which we assume to be the ultimate objective of all parties, means attracting the support of a plurality of the marginal voters in marginal ridings. We assume that the preferences of both marginal and infra-marginal voters are partly a function of underlying tastes and ideologies and partly a function of the quantity and quality of information possessed by them on the costs and benefits of alternative sets of policies.

In casting their ballots, we also assume that the marginal voters in marginal ridings (hereinafter referred to simply as "marginal voters") will select from among the competing parties that party whose policies they expect will maximize their utility (or their "comprehensive net worth," as Hartle [1979, Chap. 2] has described it). Obviously, the policy demands of marginal voters are unlikely to be homogeneous; they differ both within marginal ridings and among them. Moreover, many of these marginal voters' demands are in conflict. Satisfying Group A usually means imposing costs on Groups B and C. To satisfy Group B could mean imposing costs on Groups A and C. Often, satisfying any one group of marginal voters will not yield a plurality of marginal voters in marginal seats for any one political party, so that a package of policies, some of which are likely to be contradictory, will have to be assembled that appeal to the various configurations of marginal

voters. This is a form of the log-rolling principle in political decision-making, where policies are fashioned that are responsive to the different intensities of preferences of different groups of marginal voters on different issues [Mueller (1979), pp. 49ff].

In the light of the distinction that we have drawn between marginal and infra-marginal voters, certain implications can be derived for politically rational instrument choice. We emphasize that the implications that follow apply, even in a world of full information. First, political rationality dictates that instruments be favoured that concentrate the benefits of policies on marginal voters and do not disperse those benefits over infra-marginal voters who are either so committed to the party in question or so alienated from it that the benefits would have no effect on voting behaviour. Second, political rationality also dictates that instruments be favoured that impose the costs of these policies on infra-marginal voters, so that, again, the choice of instrument would not affect voting behaviour.

It can readily be appreciated that instruments that confer benefits only on marginal voters and impose costs only on infra-marginal voters are not necessarily instruments that would satisfy any concept of technical efficiency. Only if the objectives of the policy were completely specified so that the marginal and infra-marginal voters were clearly idendified in the specification of the policy objectives could the concept of technical efficiency be rendered meaningful. If policy objectives were defined explicitly in vote maximization terms, then it is true, as Becker asserts, that political incentives would drive politicians to choose instruments that would impose the fewest costs on other political values or interests. In this sense, the positive theory of technical efficiency in instrument choice is true, but trivial. In fact, neither Becker, nor Breyer, nor Schultze define policy objectives in these terms but typically identify *prior* "objectives" e.g. regulating monopoly, reducing pollution, enhancing farmers' incomes. But why regulate monopoly, reduce pollution, and enhance farmers' incomes? To serve what purpose? Many of the difficulties with the various versions of the technical efficiency thesis derive from the incomplete and misleading definitions of policy objectives adopted in the theories.

With objectives defined in "vote maximization" terms, what is crucial, in terms of instrumental cost, is the class of the voters who are bearing the cost. An instrument that generates more costs for infra-marginal voters may be a politically more rational choice of instrument than one that generates fewer costs for marginal voters. Thus political rationality may justify the choice of an instrument that is technically inefficient in terms of the cost elements apparently implicit in the concept of technical efficiency – transaction costs and efficiency losses – depending on who bears them and who benefits from them and how these political interests bear on the politician's vote-maximizing calculus (which we assume to be the objective of all policies).

We recognize that the central role assigned to the marginal voter in our model of instrument choice is likely to be controversial. A long-standing debate in the political science literature has focused (somewhat indeterminately) on the question of whether the partisanship/ideology of a party in power is likely to prove a better predictor of its policies than the extent of interparty competition for marginal voters [see generally Key, 1949; Cameron (1978), p. 1243; and Jennings (1979), p. 414]. Recent studies have provided support for both theories. Canadian studies of highway construction [Munro (1975), p. 298], LIP grants [Blake (1976), p. 17], and DREE grants [Macnaughton and Winn (1981), p. 318] indicate a significant correlation between the allocation of the grants and the political volatility of the ridings to which they related. On the other hand, studies of the expansion of the public sector in a number of countries [Cameron, 1978] and the scale of social welfare policies in a number of states in the United States [Jennings, 1979] suggest that the partisanship or ideological complexion of the party in power is more strongly correlated with prevailing policies in a jurisdiction that the degree of competition between parties. It is argued that "party leaders know which groups have provided them with the greatest support in the past. They are attentive to their supporters' needs and preferences because they believe that (1) past performance is the best guide to future behaviour in electoral contests and (2) the continuing loyalty of past supporters is crucial in electoral contests" [Jennings (1979), pp. 415-16].

We concede that the role of the marginal voter is likely to be most influential where there is a strongly unimodal distribution of policy preferences amongst the population. Where preferences are distributed bimodally or where they are weakly distributed unimodally with large tails, and where electoral rules favour a two-party rather than a multi-party system, the two parties are unlikely to be competing for the same voter support with respect to a large range of their policies.

In most Canadian jurisdictions, however – federally and provincially – we have largely a two-party system; and, over a wide range of policy issues, we appear to observe relatively unimodal distributions of voter preferences and with, by and large, few radical

changes in policy accompanying changes in government. A small subset of policies that have fundamental redistributive or ideological connotations may be less susceptible to this generalization [Lowi]. Given these assumptions, political rationality will dictate competition between parties for the support of the same marginal (volatile) voters with respect to policies on most issues. Any other strategy would represent a misdirection of political resources.

Imperfect Information

It will be recalled that in the second of Becker's two comments he assumed a "full information" world as the context in which governing instruments are chosen. Our discussion of the technical efficiency thesis up until this point has accepted this assumption. Even making such an assumption, we have sought to argue that technical efficiency is unlikely to be the dominant selection criterion in the determination of governing instruments in many contexts. In this section of the paper, we seek to demonstrate that relaxing this assumption reinforces this conclusion.

In contrast to Becker's full-information model, Downs [1957] develops a model of the political process in which uncertainty is central. He states [p. 78-9]:

> Voters may be uncertain in the following ways:
>
> 1 They may be aware that their total utility incomes have altered, but be uncertain about what caused them to do so, particularly about whether government or private action was responsible.
>
> 2 They may not know the repercussions upon their own utility incomes of some proposed (or undertaken) government action, mainly because they do not know what changes in objective conditions it would cause.
>
> 3 They may be completely unaware of certain actions being carried out by the government, or of alternatives the government could have undertaken, or of both.
>
> 4 They may be uncertain how much influence their own views have on the formation of government policy.
>
> 5 They may be uncertain about how other citizens plan to vote.
>
> In short, voters are not always aware of what the government is or could be doing, and often they do not know the relationship between government actions and their own utility incomes.
>
> Political parties (including the one in office) may be uncertain in the following ways:
>
> 1 They may not know what decisions the non-political elements of the economy are going to make; i.e. they may be unable to predict the economic conditions with which they must deal in running the government.
>
> 2 They may not know how a given government act will affect the utility incomes of voters, even if they know what objective conditions it will produce.
>
> 3 They may not know what objective consequences a given government act will have, even if they know how voters' utility incomes will be affected by every possible set of consequences.
>
> 4 They may not know how much influence any one voter has over other voters.
>
> 5 They may not know whether voters are aware of what the government is doing and how it affects them, or how much additional information is necessary to make voters thus aware.
>
> 6 They may not know what policies opposition parties will adopt on any given issue. If this type of uncertainty exists, a party will be unable to forecast how voters will react to its own policy, even if it knows the way voters will be affected by that policy and the nature of their utility functions.

Becker's full-information model, based on the theory of rational expectations, challenges us to explain why learning over time, both by voters and by political parties, would not dissipate most of these forms of uncertainty. The explanations for the persistence of uncertainty in the political process would seem to be several: first, neither political parties nor voters can know the future perfectly, and there will thus be unavoidable uncertainty as to possible government responses to exogenous future events. Second, theories of rational ignorance suggest that it is irrational for decision makers to invest unlimited resources in acquiring information about issues that are the subject of decision. From the point of view of voters, the differential impact in the policies being offered by competing parties on the interests of a voter may, as a matter of estimation, be likely to be so small that a voter cannot rationally justify investing significant resources in establishing precise orders of magnitude, whether positive or negative. Moreover, the rational voter must take into account the likelihood of an informed expression of preference, through the act of voting, as opposed to an uninformed expression of preference, having any impact on the outcome of an election. Given putatively small party differentials in the impact of policies on a given voter and the small probability of his vote having any impact on the electoral outcome, most voters will find it rational to avoid the investment in learning which Becker assumes will take place over the time.

Political parties, in turn, will not find it rational to make unlimited investments in the acquisition of information. For example, any particular policy option being considered by a party may have possible second- and third-order impacts on groups of voters that can only be ascertained at very high cost. To take an example given by Lindblom [1959, p. 84]:

> In planning a soil bank program [a policy maker] cannot successfully anticipate the impact of higher or lower farm income on, say, urbanization – the possible consequent loosening of family ties, possible consequent eventual need for revisions in social security and further implications for tax problems arising out of new federal responsibilities for social security and municipal responsibilities for urban services. Nor, to follow another line of repercussions, can he work through the soil bank program's effects on prices for agricultural products in foreign markets and consequent implications for foreign relations, including those arising out of economic rivalry between the United States and the U.S.S.R.

Assuming that all these consequences are, in theory, knowable, it will not be rational for political parties to invest resources in acquiring this knowledge if the second- and third-order impacts will not be discerned by voters at all or, if discerned by some voters, at least not by marginal voters or, if by marginal voters, not within the relevant time frame or not as causally connected to the government's policies.

Political information markets are flawed in another way. The limitations on available information noted above flow from rational investment behaviour on the part of either voters or political parties. According to Herbert Simon [1957, p. 198], the theory of bounded rationality recognizes that "the capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behaviour in the real world." Williamson states that bounded rationality involves "neurophysiological limits on the one hand and language limits on the other. The physical limits take the form of rate and storage limits of the powers of individuals to receive, store, retrieve, and process information without error . . . . Language limits refer to the inability of individuals to articulate their knowledge and feelings by the use of words, numbers, or graphics in ways which permit them to be understood by others" [Williamson (1975), pp. 21-22].

It is unlikely that these limitations on the ability of individuals to acquire, process, and react to information are randomly distributed amongst the population. Obviously, they are in large part a function of both natural intellectual endownments and opportunity. One would expect that the more severe bounds on rationality induced by informational disabilities are strongly correlated with family income and educational attainment. Thus bounded rationality implies some systematic biases in the choice of policies in the political market.

The existence of rational ignorance and bounded rationality on the part of voters and members of political parties creates possibilities for the provision of subsidized, selective information by groups of voters to other groups of voters, by groups of voters to political parties, and by political parties to groups of voters. Given the implicit cost-benefit analysis that many voters presumably undertake in determining how much information to acquire on issues on which they are voting, clearly their calculus can be changed by changing either the scale of the benefits to be derived from acquiring further information or the scale of the costs involved in its acquisition. Groups of voters (interest groups) may find it to their advantage to provide subsidized, selective information to other groups of voters in an attempt to modify their preferences and so, in turn, influence the vote-maximizing calculus of political parties. As our discussion of interest groups in Chapter 2 has shown, only certain kinds of interest groups, with relatively concentrated stakes in issues, are able to organize politically. In other cases, the dispersed nature of the stakes of voters in an issue entails transaction costs and free-rider problems that inhibit or preclude organization. Thus concentrated groups of voters may find it rational to invest resources in the communication of information to dispersed groups of voters about the cost and benefits of particular policy options in an attempt to persuade the latter group that their interests are congruent with the interests of the former group. Similar strategies may be rational in attempting to influence informationally afflicted groups of voters to whom the theory of bounded rationality has special application.

Alternatively, concentrated groups of voters may instead invest resources in the provision of subsidized, selective information to political parties, especially the party in power. This information will likely be directed at persuading the political party that a particular policy proposal is either adverse to or favourable to the interests providing the information but also, and critically, that the policy proposal in question is either adverse to or favourable to groups of marginal voters who are aware of the relevant impact on their interests, or whom the interest group in question can threaten (depending on the circumstances) to make aware of the impact of the policy proposal on their interests. Thus this form of lobbying will attempt to provide information that purports to reveal the political preferences of marginal voters (not necessarily accurately) or will threaten, or attempt, to change those preferences so as to be congruent with those of the interest group in question, thus forcing changes in policy consistent with the political party's vote-maximizing calculus. A variation on this strategy on the part of concentrated interest groups might be for them to place resources at the disposal of a political party (or promise to do so) so as to enable the party to provide either real or illusory benefits to

marginal voters. For example, a concentrated interest group might provide a political party with financial contributions with which it could provide subsidized, selective information to marginal voters, emphasizing the benefits to them of particular policies or proposals of the party. Alternatively, a concentrated interest group might agree to accommodate a political party in kind by, for example, locating a plant in a marginal riding where high unemployment represents a significant political problem, *inter alia*, thus conferring real benefits on marginal voters. In either case, the concentrated interest, in return for its contributions to the party in cash or in kind, will exact a policy commitment that imposes real and perhaps perceived costs on infra-marginal voters or real but unperceived costs on widely dispersed or otherwise informationally afflicted marginal voters. Thus concentrated interests are able to exact, in some circumstances, favourable policies from political parties not because they themselves are marginal voters whose support is important to the party but rather because they are able to offer resources to a political party that it can deploy in attracting the support of marginal voters.

The role of bureaucracies in influencing political decisions should be viewed in a manner similar to that of concentrated interest groups. In return for providing advice (information) to politicians on the impact of alternative policies on different sets of interests and perhaps on the intensity of voter preferences with respect to these interests, bureaucrats are rewarded in terms of such returns as pay, power, and prestige. Bureaucrats, like other interest groups, are also providing subsidized, selective information to politicians that may, or may not, be accurate and may be influenced by their self-interest in the decisions taken with the aid of the information.

Politicians, in confronting imperfect voter information, can respond in two ways. First, policies can be selected that concentrate benefits on marginal voters to the extent that the information barriers can be overcome by the size and visibility of the benefits; similarly, to the extent that a political party is unable to confine the costs of its policies to infra-marginal voters, it is in the interests of the party to impose the costs on marginal voters in as widely dispersed form as possible so that the information costs that they face make it difficult for them to identify the costs of policies or to attribute them to government action.

Second, where concentration of benefits and dispersal of costs cannot be fully attained, it will be in the interests of a political party to provide subsidized, selective information to marginal voters (often through the mass media) on the benefits and costs to them of the party policies. This information will exaggerate the benefits and depreciate the costs. Where voters are unable to validate this information easily, policies that utilize highly valued forms of symbolic reassurance are likely to be strongly favoured [see Edelman, 1967]. Thus the "leadership qualities" of a party leader are a lower-cost item of information for many voters to assimilate than the costs and benefits of his policies. A "Made in Canada" oil price appeals to voters' nationalist or patriotic sentiments. A publicly owned Canadian oil company (Petro-Canada) provides reassurance to voters who feel insecure about dependence for a staple on foreign oil suppliers and local multinationals. The "War on Poverty" taps the voters' sense of drama or pride in mobilizing a national crusade (and a sense of being able to despatch definitively a disagreeable social intrusion).

Dynamic versus Static Models of Instrument Choice

The technical efficiency thesis assumes a highly static model of political decision making, where decisions are taken both on policy objectives and on choices of instrument in isolation from one another. In fact voting preferences are typically expressed with respect to whole packages of policies, past and prospective, and it is voter reactions to alternative packages rather than to each discrete policy issue that is crucial in a political perspective. Choosing instruments in each policy setting that fully exploit both the differences in intensity of preferences between marginal and infra-marginal voters and information asymmetries is less important than choosing a full policy package with these properties. As Hartle [1979] has pointed out, voters are likely to evaluate alternative party records and platforms in terms of their impact on the voters' "comprehensive net worth" rather than engage in "line item" analysis. The log-rolling dynamic implicit in this process of public choice means that choices of objectives and instruments in functionally unrelated policy areas are politically interdependent. Thus an instrument choice that might seem, when viewed in isolation, to violate not only technical efficiency imperatives but also the political imperatives laid out in this section may become politically rational when viewed as an attempt to counteract voter reactions to some functionally unrelated policy choice. These considerations substantially complicate the development of a theory of instrument choice with strong predictive powers in particular policy settings.

Some Political Axioms Governing Instrument Choice

Subject to the last caveat, the following axioms seem to emerge from our analysis as being influential in instrument choice:

1 It is in the interests of a governing party to choose policies that confine the benefits to marginal voters and confine the costs to infra-marginal voters.

2 In order to overcome the information costs faced by marginal voters, it is in the interests of a governing party to choose policies that provide benefits in concentrated form, so that their visibility is enhanced, and to impose the costs in dispersed form, so that their lack of visibility is enhanced.

3 A governing party cannot choose only policies that provide highly concentrated benefits, because as the benefits become more clearly visible, the smaller the group of voters on which a party can realize a political return.

4 It will be rational for a governing party to treat highly concentrated or well-endowed interest groups as marginal voters to the extent that they possess an ability to provide, or threaten to provide, subsidized, selective information directly to marginal voters that might change their political preferences or to provide resources to the governing party with which it can, in turn, either confer benefits on marginal voters or provide subsidized, selective information to marginal voters intended to influence their political preferences.

5 In order to secure the co-operation of bureaucracies in implementing policies, a governing party is likely to attach special weight to the views of bureaucrats in formulating policies. Bureaucrats, in advocating policies to their political overseers, will have tendency to favour policies that have a heavy bureaucratic orientation, entailing more jobs, larger fiefdoms, and more power and prestige. The virtues of non-collective, decentralized forms of resource allocation are likely to be depreciated.

6 The more widely dispersed the group of marginal voters sought to be benefited by a chosen policy, the less real the benefits need be.

7 Perceived benefits can be made to appear greater than real benefits through the provision by a governing party (typically through the mass media) of subsidized, selective information, often of a highly symbolic nature.

8 Where, in order to confer benefits on a relatively dispersed group of marginal voters, it is necessary to impose costs on a relatively concentrated group of marginal voters, it will be in the interests of a governing party to choose a policy instrument that minimizes real costs over time, while obscuring the erosion of real benefits through the provision of symbolic reassurances to the beneficiaries of continuing commitment to the initial policy.

9 Where the dispersion of costs does not fully obscure their existence from the marginal voters who are bearing them, it will be in the interests of a governing party to provide subsidized, selective information and symbolic reassurances to the cost-bearers to reduce perceived costs below real costs; costs will be represented, to the extent perceived, as "sacrifices" or "investments" made to secure long-term benefits.

10 It will be rational for a governing party to choose policy instruments that confer benefits, or perceived benefits, on marginal voters throughout, or at least late into, the current electoral time period, while attempting to defer the real and perceived costs borne by other marginal voters to some point in time beyond the current electoral time period, where causal connections are attenuated. Where this is not possible, instruments may be chosen that impose these costs at the beginning of the current electoral time period rather than at the end, so as to exploit incomplete voter recall. For similar reasons, a governing party will tend to offer policies at election time designed to maximize voter support, while between elections policies may tend to be offered that maximize interest group support.

11 Where a governing party is uncertain about the impacts of alternative policy instruments on marginal voter interests or on marginal voter awareness of these impacts, about the intensity of voter preferences surrounding these impacts, or about opposition parties' alternative policy proposals on these issues and voter responses thereto, it may be rational to choose an instrument that maximizes reversibility and flexibility, so that continuous marginal adjustments in the balancing of interests can be made over time.

12 In the case of policies that impose real and perceived costs on marginal voters, it may be rational for a governing party to assign the administration of the policies to an "independent" agency of government, so that the causal relationship between the costs and the party is attenuated in voter perceptions.

13 Widely dispersed interest groups and groups of voters who possess inferior information-processing capacities are particularly vulnerable to the substitution of symbolism for substance in the choice of policies.

14 Recognizing the limited investment in information about policy issues that most voters are willing, and able, to make, the media will often tend to trivialize complex policy questions both in identification of the issues and in proposed prescriptions for their resolution. This may often involve the advocacy of simplistic, collective policy responses to perceived matters of public concern, so that stories can be turned over at a rate sufficient to retain the public's attention. Because the public may be influenced by this advocacy, publicians may also be compelled to attach weight to it.

Conclusions

The hypothesis that we have offered to describe the process of instrument choice in our political system involves three key set of variables. First, the choice of instrument may be legally constrained. Second, rational instrument choice involves, to the maximum extent possible, the deployment of instruments that confer benefits on marginal voters and impose costs on infra-marginal voters. Third, rational instrument choice must take account of imperfect information on the part of both voters and political parties. Political parties will respond to voter ignorance by choosing instruments that provide highly concentrated benefits on marginal voters while imposing widely dispersed costs on other marginal voters (where costs cannot be confined to infra-marginal voters). As well, the provision of subsidized, selective information, along with symbolic reassurances, will seek to expand perceived benefits over real benefits and reduce perceived costs below real costs. In short, a strategy that seeks to "magnify the gain and depreciate the pain" will be influential in instrument choice. In addition, imperfect information on the part of political parties may lead to the selection of instruments that maximize reversibility and flexibility by providing opportunities for continuous marginal adjustments in policy "objectives."

To return to Becker's technical efficiency thesis and the Doern-Wilson variant thereon, recognition of the presence of ignorance on the part of both voters and political parties renders even less plausible than our previous analysis indicated the suggestion that political parties will choose the least-cost or least coercive instrument available for the implementation of given policy objectives. Under the analysis we have developed in the last section of this chapter, politicians must reckon not only with real costs and real coercion but, more importantly, with perceptions of costs and benefits. Even where costs or coercion are perceived, it may be consistent with the vote-maximizing calculus of a political party to proceed with a policy nonetheless, either because these perceived costs are imposed on infra-marginal voters or, even if imposed on marginal voters, are outweighed, in terms of voting behaviour, by the response of the marginal voters for whose benefit the policies are intended and whose preferences for them may be more intense than the preferences of the cost bearers in opposition to them.

With respect to Schultze's more normative argument that excessive reliance has traditionally been placed on what he calls "command and control" forms of regulation and insufficient reliance on forms of regulation that harness market-like incentives, our analysis would suggest that his plea is largely a futile one. Politicians invoke command and control forms of regulation for several reasons that make the use of this class of instrument fully rational in their terms. First, highly dogmatic forms of regulation – e.g. "hazardous products are banned"; "pollution must stop" – drastically reduce the information costs faced by voters in determining the government's policies in these matters; policies, such as pollution taxes, that depend on second- or third-order effects, in terms of responses to changes in relative prices, are too complex for the intended beneficiaries to perceive the benefits. From a politician's perspective, a benefit unperceived, no matter how real, is no benefit at all. Second, "command and control"-type regulation, in part because of its highly symbolic commitment to given interests, enables differences between perceived and real benefits, and between perceived and real costs, to be maximized. Stirring proclamations of intent in a statute, symbolizing high commitment to the cause, can be eroded in the low-visibility, day-to-day enforcement process, where political and bureaucratic discretion can reduce real costs below perceived costs for the regulated and also real benefits below perceived benefits for the beneficiaries. Third, the ongoing relationships between regulators and regulatees implied in this type of regulation provide frequent opportunities for mutually advantageous "trades" between politicians, bureaucrats, and regulatees. Fourth, the process of selective enforcement over time facilitates the determination of optimal configurations of marginal beneficiaries and infra-marginal cost bearers. Finally, politicians, as recipients of advice (information) from bureaucrats (as a major interest group), are likely to face systematic selectivity in the advice received in favour of centralized "command and control"-type regulation, which is resource-intensive in terms of bureaucratic inputs, and against decentralized, market-oriented, regulation of the type that Schultze favours.

In acting as they do, politicians are acting as rational, self-interested, individuals. Can we realistically demand that they act otherwise? If not, then to the extent that we are unhappy with the outcomes of the policy-making process, our attention should be focused on the constraints under which policy decisions are made. Only by changing the constraints can we change the outcomes [Buchanan and Tullock, 1962; and Buchanan, 1975].

In the four chapters that follow, we examine four major classes of governing instrument and, in each case, are concerned with identifying both the technical efficiency attributes of alternative instruments and the characteristics that may lead to instrument choice on some other basis. The factors that create divergences between technical efficiency and political rationality in instrument choice are the principal focus of our analysis.

4 Public Inquiries

The range of instruments examined in this chapter includes the various ways in which the government studies or investigates issues of public concern. The modes of inquiry include royal commissions, task forces, parliamentary committees, standing regulatory and advisory bodies, and departmental and interdepartmental studies. While these forms of public inquiry may traditionally have been thought of solely as the means to formulate new policies and not as instruments for implementing policies, this conception ignores the role of inquiries as policy outputs [Wilson (1971), p. 113]. In other words, while inquiries are no doubt important mechanisms for developing new policies, it is important to recognize their role as policy outputs or instruments as well [Doern and Wilson (1971), p. 271].

In their writing on the spectrum of available instruments and the substitutability of these instruments, Doern and Wilson [1974, pp. 339ff] have clearly located public inquiries within their analytical framework. They have written [p. 339]:

> This hypothesis would suggest that politicians (especially the collective cabinet) have a strong tendency to respond to policy issues (any issue) by moving successively from the *least coercive* governing instruments to the *most coercive*. Thus they tend to respond first in the least coercive fashion by creating a study, or by creating a new or reorganized unit of government, or merely by uttering a broad statement of intent. The next least coercive governing instrument would be to use a distributive spending approach . . . .

While in Chapter 3 of this book we questioned the validity of the coercion aspect of their hypothesis, Doern and Wilson are certainly correct in arguing that any consideration of the range of substitute instruments must include public inquiries as policy outputs. That this is not the conventional view of public inquiries can no doubt be partly attributed to the fact that the announced purposes of such inquiries almost always emphasize the means rather than the ends aspect of these endeavours. The announcement of an inquiry will normally be set in the context of a government's intention to arrive at a "solution" to a particular policy problem. To focus on the "solution" as the end, however, and to ignore the nature and substance of the search process will often result in missing much, if not most, of the purpose of the exercise. Since commonly the subject under study is one to which there is no "solution" in a technocratic sense and to which no final answers will be given or found, the process of the public inquiry must be viewed in large part as a form of response to the policy problem and not merely as a means to search for a response to the policy problem. Indeed, in many ways, public inquiries emphasize the inadequacy of the means-ends dichotomy when speaking of the major policy issues on the public agenda.

Within the general category of public inquiries, there are numerous variants, each with particular features. These various types of inquiries can be thought of as forming a spectrum of modes of inquiries, although, as will be developed below, there is no single convenient axis along which to array them. At one end of the spectrum, however, the distinction between regulation and inquiries becomes murky, as regulatory agencies engage in regulatory activities that might best be characterized as mere inquiries. That is, in situations where regulatory agencies lack the final authority to implement their decisions, their deliberations and conclusions might better be thought of as a form of advice or a form of inquiry rather than a regulatory decision. For example, when the Foreign Investment Review Agency considers an application for approval, its decision is only a recommendation to Cabinet. The actual decision on the application depends on the Cabinet taking a position; thus, in the absence of a total deferral to the Agency's recommendations, to describe the Agency's work as regulatory may be to overstate its role. Similarly, agencies such as the National Energy Board, which are specifically granted a mandate to act at times in an advisory capacity [National Energy Board Act] are perhaps best viewed as acting as a form of public inquiry and not as exercising regulatory authority in these circumstances. The final assessment of how to characterize a particular agency in a specific setting must depend

on an assessment of the actual degree of final authority being exercised by the agency.

Some forms of public inquiry have attracted very considerable criticism. For example, there have been repeated criticisms of royal commissions. As Hodgetts [1964, p. 475] has summarized:

> It is contended that Royal Commissions are convenient devices for shelving problems, postponing decisive action or providing a pseudo-objective stamp of approval for a line of action to which the government is already firmly committed. They have been accused of white-washing Ministers, of besmirching the good name of the judiciary by bringing members of the Bench into contentious public issues, and of confusing the lines of direct ministerial responsibility to Parliament. Possibly the conviction most widely entertained is that the reports of Royal Commissions are always prematurely buried in Ottawa.

Despite their persistence, however, perhaps the most striking aspect of these criticisms is how little heeded they have been. Hodgetts has commented: "Whenever a problem – even of the most modest or parochial dimensions – is encountered, it has become almost routine practice to plead for a royal commission to look into the matter" [p. 475]. Thus here, as with the many forms of regulation, we observe frequent resort to an instrument – a royal commission – that is criticized as being in some sense inefficient. Furthermore, the repeated specification of this perceived inefficiency, while perhaps persuasive to students of public administration, has found little favour among those responsible for deciding whether to initiate a royal commission. This paradox of frequent but ignored criticism suggests that in this area, as in other areas considered elsewhere in this study, efficiency in a technocratic sense alone is unlikely to provide a robust explanation of the selection of instruments. As the analysis in Chapter 3 indicated, an understanding of the selection of the instrument of inquiry and the particular mode of inquiry must be found by analysing the instruments' characteristics and the way in which political decision makers would view these characteristics. Such an analysis may permit us to understand the continuing paradoxical juxtaposition of criticism and utilization short of resorting to cynicism [Wilson (1971), p. 115].

The remainder of this chapter is therefore devoted to a description of the primary modes of public inquiries and their characteristics, which are relevant to the calculus of political choice. While the analysis follows the general approach of the following three chapters, it must be acknowledged that not all the points of comparison among taxation, expenditure policy, debt management, public ownership, and regulation have obvious application to the study of inquiries. That is, while it is possible to view these instruments as substitutes in some circumstances, the cross-elasticity of supply of the instruments is much lower between inquiries and other classes of instruments than among the other instruments considered in the chapters that follow.[1] This occurs because the announced purposes of inquiries can only rarely approach the similarity of announced purposes that can plausibly be attached to the other instruments. There is undoubtedly, however, some substitutability – substitutability often born of necessity. As Doern and Aucoin [1971, p. 268] have stated:

> The relationship and degree of strain and competition between the new and on-going policy structures is in large measure explained by this most elementary of propositions. If allocative resources are scarce and governments cannot respond with actual allocative outputs, they will often respond with less expensive positional policies by creating, for example, a royal commission or a task force. The political system in authoritatively allocating values must primarily have the capacity to allocate concrete economic resources, goods, and services.

While the substitutability between public inquiries and the other instruments may be relatively limited, there is a high degree of cross-elasticity of supply among the principal types of inquiry. In some sense, all forms of inquiry are directed towards, and are able to achieve, an essentially similar result: the production after a period of time of a report or recommendation on a matter of policy. Given this broadly similar end, the different means of reaching this end are understandably substitutable. Thus royal commissions, task forces, investigations by parliamentary committees, investigations by advisory and regulatory agencies, and departmental and interdepartmental studies can be interchanged by the political decision makers in many situations. At the same time, however, it is our hypothesis that this interchange is not a random matter but rather one that will be determined by the political decision maker's perception of the relative attractiveness of the different forms of inquiries in any particular setting, this relative attractiveness being determined by the instrument's critical characteristics set in the context of the kinds of demands to which a response must be made.

Hodgetts has commented on the substitutability of the different forms of inquiry. After reviewing the substance of the criticisms made of royal commissions, and granting in large part their validity, he calls into question the effectiveness of royal commissions for "unravelling the causes of present discontents" [p. 477]. He then states that it might reasonably be assumed that when a nation develops effective investigative procedures as alternatives to inquiries

by royal commissions, the latter would tend to be used much less frequently. Noting, however, the paradox that the historical record does not support this conclusion, he then surveys the potential role of committees of the House of Commons, committees of the Senate, and internal fact-gathering policy evaluation units in the departmental structure of the federal bureaucracy, and he concludes that while each of these techniques has its attractions, none is sufficiently attractive to politicians to avoid the frequent refrain calling for "one more royal commission to get at the facts and study the situation before hasty or premature decisions are made." In our view, the persistence of all of the various types of inquiry is evidence that while they are superficially similar in result, each form of inquiry has its own unique characteristics that will determine its utilization in particular settings. By examining these characteristics, one can begin to develop a coherent explanation of instrument choice in this area.

The Primary Types of Inquiries

Any categorization of the types of public inquiries is necessarily arbitrary in that there is practically an infinite range of ways in which a government can structure its study of a problem. Any time the government embarks on an evaluation of an identified area of public concern, one could characterize that effort as a public inquiry warranting classification. Even relatively well accepted terms such as "royal commission" include a wide variety of particular forms of inquiries [Law Reform Commission (1977), p. 5]. For the purpose of this chapter, however, we have identified five primary forms of inquiry: royal commissions, task forces, parliamentary committees, inquiries by statutory regulatory and advisory bodies, and departmental and interdepartmental policy studies.[2] Each of these is described below.

Royal Commissions

Perhaps the most publicized form of inquiry has been the royal commission. [For an introduction to the role and nature of royal commissions, see Wilson, 1971. For further references see Doern and Aucoin (1971), pp. 287-90; Law Reform Commission (1977), pp. 7-20, and (1979); Berger (1977), pp. 223-30; Chapman (1973); and Bulmer (1980).] Technically speaking, the term "royal commission" should be limited to those inquiries initiated pursuant to the Great Seal of Canada [Law Reform Commission (1977), p. 5]. The term royal commission, however, is commonly used to describe inquiries appointed pursuant to the *Inquiries Act* [1970], Part I and Part II, or pursuant to the facilitating provisions in numerous statutes.[3] Royal commissions have been a ubiquitous feature of the Canadian political landscape over the past century; it has been estimated that there have been almost 1,900 inquiries appointed under the *Inquiries Act* alone since Confederation [Law Reform Commission (1977), p. 11]. These inquiries have studied a vast range of subjects, ranging from the very narrow (the sex life of the oyster, the sex life of cabinet ministers, the fall of a bridge) to the very broad (bilingualism and biculturalism), and including virtually all of the major social, economic, and cultural issues facing the country [Hodgetts (1964), p. 477].

The *Inquiries Act* contemplates two primary forms of inquiry: advisory inquiries on matters of general policy under Part I of the Act, and departmental or investigatory inquiries under Part II. The Act restricts the scope of the latter type of inquiry to studying matters of controversy concerning the government itself.

The different roles of advisory and investigatory royal commissions have been summarized by the Law Reform Commission of Canada [1977, pp. 18-20] as follows:

> When it comes to assisting the legislature, then advisory commissions of inquiry, broadly speaking, perform three functions that we may describe as supplementary functions. They bring objectivity and expertise, free from the constraints of the legislature timetable, to the solution of problems. They provide an additional vehicle for the expression of public opinion. And they gather and transmit representative opinion. In general they advise on one or both of two things – expert solutions, and public opinion.
>
> Investigatory commissions supplement the activities of the mainstream institutions of government. They may investigate government itself, a function that must clearly fall to some body outside the executive and public service. They possess an objectivity and freedom from time constraints not often found in the legislature. They can deal with questions that do not require the application of the substantive law by the courts. And they can reasonably investigate and interpret matters not wholly within the competence of Canada's various policy forces.

While there is no single model of royal commission that would describe all those that we observe, there are some common features. Royal commissions are led by either a single commissioner or by a number of commissioners of whom one or two serve as chairman or co-chairman. The commissioners retain a staff who assist them in evaluating the subject before them, and the staff normally includes legal counsel. The staff may be seconded from the public sector or hired from the private sector, although a mixture of personnel is common. The inquiry is governed by terms of reference, issued by the Governor in Council,

that set out the tasks to be undertaken by the commission and, in some cases, the manner in which they should be undertaken. Funds are provided through normal appropriations approved by the Treasury Board upon application by the commission. Reasonable funding requests by commissions, however, are normally approved without difficulty or debate.[4] The commissions normally have all the powers accorded by the *Inquiries Act*, including the power to summon witnesses. Royal commissions report in due course to the government, normally by means of a published report to either the responsible minister or the Prime Minister. The commissioners are normally drawn from outside the public sector, except in the case of judges who are quite commonly appointed to serve as commissioners, particularly in situations where the inquiry has a substantial investigatory responsibility.

Task Forces

The advent of task forces as a form of public inquiry has been traced in part to some of the limitations on the functional utility of royal commissions. Speaking of these limitations, Wilson [1971, pp. 121-22] has stated:

> Perhaps the most crucial one insofar as politicians are concerned is the time element: on many public policy issues it is imperative to have some new ideas in the shortest period of time at minimum expense. Yankee ingenuity has thus fashioned an instrument to deal with this kind of situation, namely, the task force. Nurtured and developed during the "New Frontier" era of John F. Kennedy, the task force concept was initially used by the President to introduce what has been termed "broadly innovative" ideas into his administration .... The task force therefore began its existence as an instrument of policy making, combining intellectuals aware of the practical constraints of government with civil servants and other knowledgeable private citizens. There have been other advantages as well: most task forces are lightly funded, thereby avoiding the need for research teams. Instead, consultants and personnel engaged in survey research work have been utilized most extensively, providing necessary information on which recommendations are based.

Wilson has traced the first Canadian encounter with task forces at the executive level to the early years of the Pearson minority government. Since that time, their use has been expanded and extended across the full range of policy issues faced by the government as task forces of both intra- and extra-government kinds have been set the task of studying a very wide range of subjects.

Task forces as a generic form of inquiry are more difficult to describe in general terms than royal commissions, in that there is even greater possible variation of form within the general mode. This variation is made possible by the dominant characteristics of task forces, which are their informality and flexibility. Task forces depend for their existence on informal executive appointment. They lack the legal status, powers, and constraints imposed by the *Inquiries Act*. As a result, they are generally cheaper, faster, and less formal than royal commissions and less likely to adopt an adjudicative mode. Furthermore, they are generally perceived as less independent of the executive than royal commissions, in that they are usually more closely aligned with the executive branch. The membership of task forces may be drawn exclusively from a department of government, may be interdepartmental, or may combine people drawn from the private sector. The task force is governed by terms of reference issued either formally or informally by the responsible Minister. One important feature that distinguishes task forces from royal commissions is that since they are informal, administrative aids to the executive, they are not required by statute or convention to publish their reports or to make accessible, within a specified time, the research studies on which their recommendations are based [Wilson (1971), p. 124]. Thus the emphasis of task forces is on the collection of information for the executive and not necessarily on the dissemination of information by means of a report other than to the members of the executive responsible for the appointment of the task force [Wilson (1971), p. 124; and Schindler and Lanphier (1969), p. 497].

Parliamentary Committees

Standing and select committees of the House of Commons and the Senate represent an alternative mechanism for policy formulation. Since Confederation, the Canadian Parliament has had a system of specialist standing committees of the House that have been responsible from time to time for studying matters of public concern. [For a view of the role of standing committees see Franks (1971), p. 451; Stewart (1977), pp. 157-97; and Hockin (1970), p. 185. For proposals for reform, see, *inter alia*, D'Aquino, Doern, and Blair (1979), pp. 85-91.] Indeed, "it is in committees ... that investigatory inquiries, studies of policy areas or problems and detailed examination of bills referred by the House are intended to be carried out" [D'Aquino et al. (1979), p. 85]. While committees have been a long-standing feature of the Canadian parliamentary system, major reforms were introduced in 1968 as a result of the *Report of the Special Committee on Procedures*, designed to enhance and strengthen the role of committees in the policy formulation process [see Franks, 1971; and Stewart, 1977]. Standing committees were reduced in size, and their workload

was increased. They have been given full responsibility for all work on legislation at the committee stage, unless the House expressly refers matters to the Committee of the Whole, in addition to being responsible for undertaking inquiries on policy issues at the request of the House. These changes have increased the potential for parliamentary inquiries to serve as an important forum for policy formulation [Hockin (1970), p. 202]. Indeed, even prior to these reforms, Hodgetts had identified the substitutability of royal commissions and standing committees as vehicles for studies of matters of public concern [Hodgetts (1964), p. 477].

Hodgetts, however, identified a number of factors that had, up to that time, made the legislative committee system "a less than satisfactory alternative to royal commissions." He included the time constraints that committee service imposed on members of the House, the large size of committees, the lack of research resources to support their inquiries, their domination by members of the majority party, the inhibiting effect of party discipline, their limited time horizons and their inability to travel throughout the country to hold public hearings at convenient locations. While the reforms of the late 1960s remedied some of these limitations, the committee system still has a number of structural features that distinguish it from other forms of public inquiry – features that have implications for the relative attractiveness of committees to political decision makers as a vehicle for public study.

Standing committees are composed of members of Parliament in direct proportion to the relative House standings of the major parties. Each committee has a chairman drawn from the government party, except for the Public Accounts Committee whose chairman is drawn from the Opposition. As a general rule, party discipline born of cabinet solidarity applies at the committee stage. As a result, the majority party controls the outcome of committee proceedings.

Committees are responsible for specific policy areas. Committees receive a mandate for study in three ways. First, as a matter of course they receive legislation after Second Reading unless the House elects to send the matter to the Committee of the Whole. Second, on rare occasions, the House will refer a matter after First Reading to a committee for more broadly based study than normally follows Second Reading. Third, the House may, by resolution, refer a policy problem to a committee for study, sometimes assisting the committee by referring a green or white paper to the committee at the same time. Committee staffs are normally very modest, with only the committee clerk being a standard feature.[5] Committees, however, do from time to time hire temporary professional assistance. In addition, the resources of the Parliamentary Library and the political parties' own research staffs can be made available to the committee members. Committees report to the House at the conclusion of their deliberations by tabling reports in the House. These reports on estimates and policy issues are not, as a general rule, voted upon by the House, while committee amendments to bills are. Committee reports range from brief summaries of the minutes of committee proceedings through to substantial reports of a hundred pages or more [Franks, 1971].

While standing committees of the House are the most common form of committee in the federal Parliament, there are also Select Committees of the House, Senate Committees, and Joint Committees of the House or Senate. Select committees are not commonly used federally, although some provinces make extensive use of them. Select committees are committees formed for the purpose of studying a particular matter that warrants intensive and specific study over a limited period of time. When used, they often have considerably greater resources available for purposes of staff than do standing committees [see Trebilcock et al. (1979), pp. 230-31]. Senate committees are similar to House committees, although some would argue that some of the limitations on House committees (shortage of time, the pressure of re-election, and so on) do not exist to the same extent in the case of the Senate [Hodgetts, 1964].

Statutory Regulatory and Advisory Agencies

This category of instrument for undertaking public inquiries includes the central advisory councils (e.g. Economic Council of Canada; Science Council of Canada), functional advisory councils (e.g. National Research Council of Canada; Law Reform Commission of Canada; Medical Research Council of Canada), regulatory agencies acting in an advisory capacity (e.g. the National Energy Board, pursuant to section 22 of the *National Energy Board Act*), and regulatory agencies undertaking investigations and inquiries subject to ministerial or Cabinet approval or override [see, generally, Royal Commission on Financial Management (1970), chap. 18, pp. 309-25]. Broadly speaking, any independent or quasi-independent standing agency engaged in policy analysis or formulation but lacking final executive authority to implement its decision could be included in this category. As such, the category is so broad that it is difficult to be descriptive of the category other than to stress two or three features common to inquiries falling within this category that distinguish

them from other forms of inquiry reviewed in this chapter.

These agencies all enjoy a degree of independence from the executive, although this independence varies from agency to agency. While members of the agency may be appointed either for a fixed term or at the pleasure of the Governor in Council, once appointed the members enjoy a degree of independent status as a result of the governing statutes. These agencies normally have their own staffs outside the departmental structure of the government. Agencies may initiate studies of policy matters in a number of different ways: through a statutory obligation (e.g. oil and gas supply and demand hearings, pursuant to section 22 of the *National Energy Board Act*), Ministerial or Cabinet reference (e.g. the Economic Council of Canada's Regulation Reference), its own initiative (e.g. the great majority of the investigations by the Law Reform Commission of Canada), or at the initiative of a party or interest group related to the agency (e.g. decisions of the Foreign Investment Review Agency; some hearings of the CRTC). The report by the agency to the government and/or to the public can take many forms, ranging from the confidential to the publicly distributed and from adjudicative decisions to broad policy recommendations.

Departmental and Interdepartmental Studies

The most common form of public inquiry is, of course, that undertaken pursuant to the normal policy formulation processes of the permanent civil service embodied in the various departments of the government. While many members of the civil service primarily bear a service responsibility, significant energy within the departments is also devoted to the consideration of policy developments. Indeed, recent years have seen a significant growth in the resources devoted to policy matters within the federal government as policy analysis units, policy directorates, branches, groups, units, co-ordinators, committees, and the like have all become commonplace [for an extensive analysis of this phenomenon, see Prince (1979), p. 275]. Furthermore, numerous departments engage in extensive fact-gathering exercises. The activities of Statistics Canada, supplemented by the fact-gathering efforts of the various departments – which, in many cases, are substantial (e.g. the Department of Labour) – combined with the commission of surveys, questionnaires, and the like have provided the civil service with enormous informational resources enabling it to become the dominant form of public inquiry for the purposes of developing new policies. Indeed, given the size, strength, and quality of this operation in its totality, it is perhaps at first blush surprising to see such frequent resort to the other instruments of inquiry outlined above [Hodgetts, 1964].

In addition to departmental inquiries, the government may resort to either interdepartmental inquiries or inquiries undertaken by the central agencies – the Privy Council Office, the Prime Minister's Office, and the Treasury Board Secretariat. The role of the central agencies and their growth in the past two decades in the federal government have been documented extensively elsewhere and will not be repeated here [see, generally, Hockin (1977); Phidd and Doern (1978); and Doern (1979), p. 27]. Inquiries by central agencies are further supplemented by interdepartmental task forces studying problems upon the instructions of one of the central agencies.

The structural features of departmental policy formulation are complex but, at the same time, well known; thus there is no need in this chapter to review them. It might be useful to highlight one or two points, however. The hierarchical nature of a department, combined with the ultimate responsibility of the minister to the Cabinet and the House, means that departmental studies can in no way be described as independent. Indeed, the term "independence" must be measured in terms of its departure from the norm of the departmental study. Furthermore, the scope of matter that can be studied in this fashion is unlimited; there are virtually no constitutional or statutory limitations with regard to subject matter or initiative that can be taken by either the minister or some other actor within the bureaucracy. The techniques of fact finding that may be adopted may well be limited, however, as normally the department will lack the powers accorded other forms of inquiry to compel witnesses to disclose information. As for the form in which to report the results of a study, just as in the case of task forces, there is no obligation to make a public report. Indeed, the report may be nothing more than an oral report made to the Minister or some other person in the departmental hierarchy. The very existence of the study itself may never be known outside the department, much less its contents. At the same time, such reports can, if it suits the political purposes of the government, be released in any number of forms, including the partial publication of the results of an inquiry. One form of report is for the government to issue a green paper or white paper on the subject, as the result of the inquiry, and then to seek comment through some other forum [see Doern (1979), p. 27]. At this stage, the departmental inquiry may be transferred to a parliamentary committee for study, and the green or white paper might be referred to such a committee for further study.

The Substitutability of Public Inquiries for Other Instruments

While there are important variations in the characteristics of the five general types of inquiries described above, all forms of inquiry share some common characteristics that distinguish them from the other instruments dealt with in this book. By describing these common characteristics, it is possible to identify some of the factors that influence the substitutability of public inquiries for the other instruments analysed in subsequent chapters.

Perhaps the most important characteristic of all forms of public inquiry is its role as a mechanism whereby the government can demonstrate concern and action about an issue, in a world where lack of concern and lack of action are an anathema. As we have written in another context, politicians are constantly pressed to intervene, with the following result [see Trebilcock et al. (1978), no. 11, p. 34]:

> Given that they have, after all, been elected to govern, i.e. make collective decisions, any state of the world short of some mythical state of perfection is going to lead some groups to demand that state of perfection and some politicians to promise to deliver it. Given that, it is only a small exaggeration to say that at any point in time politicians are either constantly figuring out ways of both making gestures at honouring past promises and of fashioning new ones. The one choice that is not realistically open to any political party is doing or promising nothing.

Thus the announcement of a public inquiry can be interpreted as "doing something" when faced with political demands. It demonstrates the government's concern and creates at least the illusion that progress is being made towards a final solution to the identified problem [see Wilson (1971), p. 118, citing Willms (1967), p. 411].

The second major characteristic of all forms of public inquiry is that they permit the government to respond to political demands at relatively low cost. While some inquiries are undoubtedly expensive (the Berger Commission on Northern Pipelines cost well over $5 million), the costs are normally dwarfed by the cost of actually implementing the policy solutions offered by the inquiries. For example, while it may be expensive to undertake a thorough inquiry of the need for national health care insurance, that cost is but a tiny fraction of the cost of actually implementing a national health care insurance program. Thus the announcement of an inquiry can be a technique for deferring the implementation of a substantive policy response and the resources attendant upon such implementation. Writing on this point, Wilson [1971, pp. 117-18] has observed that: "Significantly, the Canadian government resorted to the highest yearly average use of royal commissions as instrument of policy-making during the three periods in our history when allocative resources were extremely scarce."

The third major characteristic of all types of public inquiry is its role in the generation and analysis of information about alternative policies and the public's needs and desires in a particular policy area. In the course of an inquiry, existing information can be gathered; new information can be produced; and information can be exchanged between policy makers and members of the public. Major advances in learning about a subject may be made. For example, the Royal Commission on Taxation in the 1960s substantially expanded the state of knowledge about Canadian taxation.[6] Perhaps more significantly, the Commission was also an important training ground for a generation of Canadian public finance and taxation specialists, who collectively have substantially enhanced the level of public expertise in this policy area. Through experimentation, the public's reaction to alternative policies can be tested in advance of an actual decision. Furthermore, the process of the inquiry may be an opportunity to educate and explain a new policy in an attempt to gain greater public support for it, either through an enhanced understanding of the policy or a change in tastes towards the policy.

Fourth, many forms of inquiry offer politicians a way in which to put some distance between themselves and those considering alternative policies. That is, by designating some quasi-independent body responsible for considering policy options, the politicians can take credit for the fact that the matter is under study without being responsible for, or bound to, the suggestions made in the course of the inquiry. Thus, while shifting responsibility away from himself, the politician is able to gain the advantages of the inquiry – demonstrating concern, deferring the need for resources, generating new information, and educating the public – without irreversibly becoming tied to the results of the inquiry. Thus if the results of the inquiry are politically uncongenial, the politician can disown the results and head in a new direction.

A fifth point, related to the fourth, is that those responsible for undertaking the inquiry generally lack the authority, or influence, to implement the recommendations of the inquiry. Although it is always a matter of degree, as a general principle the policy makers at the inquiry level lack the executive authority to implement their decisions since their deliberations are for the purpose of advising, not binding, the politicians. This absence of implementation authority enhances the politician's ability to create discontinuity between the recommendations and the actual

policy decision, since once the inquiry is completed (and often the inquiry members are dispersed), the politician still has a choice open to him as to how to proceed. The corollary of this lack of authority to implement may be a tendency on the part of inquiries to promise more than can reasonably be delivered. That is, since the inquiry members, as non-decision-makers, do not face the same reality of resource constraints that the actual decision maker must face, the recommendations may often avoid making tough choices among competing interests since in an unconstrained world there is the temptation to be everything to everybody.[7] It should be noted, however, that failure to make tough decisions by deferring them to the politicians may be exactly what the politicians do not want in some circumstances, since the very virtue of independence referred to above depends on being able to assign responsibility for unpopular choices to independent bodies. It is therefore not surprising that politicians may design the terms of reference, legislation, or other device, and create the inquiry in such a way as to try to force it to make these tough choices.

In sum, all public inquiries offer to politicians the opportunity to demonstrate concern about a policy issue and to indicate that action is being taken upon it, while deferring the need to expend substantial resources in response to a perceived policy concern; to obtain advice, while maintaining some distance from the source of that advice, so as to be able to reject it where necessary; to generate, analyse, and exchange information, while informing and persuading the public of the merits of certain points of view; and to assess the public's tastes for proposed policy initiatives.

While these characteristics are common to all forms of public inquiry, they distinguish public inquiries from the other major alternative instruments considered in this paper – public ownership, taxation, expenditure policy, debt management, and regulation. As we stated above, there does not appear to be a high degree of cross-elasticity of supply between inquiries and the other instruments mainly because the stated purposes of inquiries can only rarely extend to actual policy implementation of the kind inherent in the imposition of a tax or the issuing of a regulation. Inquiries, by their nature, are designed to produce recommendations for policies rather than to actually implement policies, thus making it difficult to conceive of inquiries and policies as substitutes.

To put the issue this way, however, is to understate the substitutability of inquiries for other instruments, for two reasons. First, as stated above, the decision to create an inquiry is clearly a policy output; it represents the government's response to competing political demands for action and inaction, deferring major resource implications while demonstrating concern for a problem. While it is not a decision to do nothing, it is closer to a "non-decision" than any of the other instruments.

Second, inquiries are often substitutes for other instruments in a temporal sense; that is, while inquiries do not represent a long-run alternative to the utilization of one of the other instruments, they often precede that utilization. Thus it is common to see a public inquiry being followed by a policy initiative invoking one of the other instruments. This sequential use of inquiries accomplishes many governmental purposes. It defers the resource implications, permits delay in order to cushion the transition costs on various interests associated with a policy change, provides a means for measuring the public's reaction to the various instrument choices possible, and establishes an information base for alternative policy initiatives.

In these senses, therefore, there is a degree of substitutability of public inquiries for the other instrument. There is a much higher degree of cross-elasticity of supply among the different types of public inquiries, however, since in many contexts they present close substitutes. As a result, once the decision to create an inquiry is taken, the political decision maker must still decide what form of inquiry to adopt. Consistent with the thesis stated elsewhere in this paper, it is our hypothesis that this latter choice will be determined in large part by the characteristics of the various forms of inquiry available to him. That is, the political decision maker will assess each of the possible alternatives in terms of its relative attractiveness to him as a technique of investigation and will choose the technique that maximizes his political advantage. That, historically, these choices may have failed to accord with the predictions of traditional political science and public administration theories should not be surprising, once attention is focused upon the politician's self-interest and not on "good government" in the technocratic sense. At this stage, we therefore turn to a consideration of the primary variables among those types of inquiries which might influence political choice.

Substitutability among Different Types of Inquiries

In considering the characteristics of the various forms of public inquiries, it is difficult to attribute much substance or influence to the concept of technical efficiency discussed in Chapter 3. In an abstract world, it might be possible to define technical efficiency for public inquiries as the ability to

determine the best policy solution at the least possible cost. Even to state such a definition, however, is to display its inadequacy in that it fails entirely to capture the multiplicity of objectives of an inquiry. That is, arriving at "an answer" will commonly be just one of the numerous objectives of the inquiry; others include the processing of values, delay, deferral, education, persuasion, participation, and the like. Thus the definition of technical efficiency puts too much emphasis on the achievement of efficiency in policy outputs and neglects the other features of inquiries that emphasize how the outputs are to be arrived at. The manner in which the policy is to be arrived at may be just as important as the outcome itself. As a result, any definition of technical efficiency that ignores this relationship of means and ends is inadequate in terms of both predicting the choice of instruments and making normative judgments regarding instrument selection. On the other hand, any definition broad enough to capture the multiplicity of inquiry objectives would be so divorced from the accepted meaning of efficiency that it would be equally unhelpful.

The major differences between the various types of public inquiries fall into six categories: accountability, political dynamics, participation, visibility, timing, and costs. While all of the categories are interrelated, particularly the first three, all six are discussed separately below, to illustrate the variations among the different types of inquiries and some of the implications of this variability for the political decision maker.

Accountability

The degree of the politician's accountability for the conduct and result of an inquiry varies with the form of the inquiry. For those inquiries accorded considerable independence in their endeavors, the politician is able to point to this independence as evidence of a lack of responsibility on his part for the inquiry's conclusions. This lack of accountability then preserves flexibility for the politician at the conclusion of the inquiry, in that at that point he is free either to embrace warmly the results or to indicate that he is not bound to accept the inquiry results. In contrast to this, in those situations where the inquiry is directly accountable to the politician, he is less able to disown the results. At the same time, however, to the extent that he is responsible in his executive role, he is also likely to possess the interim ability to influence, if not dictate, the outcome of the inquiry in advance, thus avoiding the embarrassment of being responsible for an inquiry, the results of which he might find uncongenial. As a result, the independence, or lack thereof, accorded a particular form of inquiry may make it relatively more or less attractive to the politician, depending on his objectives in particular circumstances. Where he wants to retain flexibility, defer responsibility, and claim independence, he will choose a mode of inquiry that is relatively less accountable to him. Conversely, where control is of the essence, he will opt for a form of inquiry that can be held fully accountable to his executive authority.

On the spectrum of accountability or control, it appears that a royal commission is least subject to the politician's control, while an internal departmental study is most subject to executive control, with the other three forms of inquiry falling somewhere in between. The regulatory or advisory agency is closer to the royal commission, and the parliamentary committee is closer to the departmental study, while the task force may be anywhere between the extremes, depending on its particular design and personnel. The departmental study is subject to the direct executive authority of the politician; thus the degree of control is limited only by the extent of the inherent limits of executive authority. The parliamentary committee is also tightly controlled, in that the government (assuming it is a majority government) always has a majority on the committee, and these government members are bound by party discipline to uphold the government's position. Thus, while opposition members may dissent and be obstructionist and while individual members of the government party may be tempted from time to time to stray from the government line, as a general rule the final substance of the committee's report can be assured in advance.[6]

The outcome of both royal commission and agency studies are considerably less predictable at the date of initiation. While there are certain techniques for attempting to maintain control of royal commissions and yet giving the appearance of independence – terms of reference, time constraints, budget limitations, selection of commissioners, and so on – these techniques are all limited in their efficiency. [For a discussion of the limitations of these various control techniques, see Law Reform Commission, 1977.] As a result, royal commissions, once appointed, have a very wide range of latitude beyond the minister's control. The example of Mr. Justice Berger's departure from his term of reference, time constraints, and budget estimates is perhaps the best example of this phenomenon. A regulatory or advisory agency engaged in an inquiry may be more or less subject to the control of the politician; however, to the extent that the constituting statute grants the agency independent discretion and authority, the politician's control is directly reduced.

The degree of accountability or control of the minister over the procedures of the inquiry may vary with the particular use to which a particular mode is put. For example, where the government wishes to extend a degree of flexibility to a parliamentary committee, it may merely refer a general policy problem or a green or white paper to the committee, rather than limit the committee's work to the study of legislation after Second Reading. By sending it a subject at an earlier date than Second Reading, the Minister is, according to Parliamentary convention, signaling his willingness to be flexible with regard to the subject and his desire for comment and modification.[9] Thus, in selecting an instrument, the politician must not only choose the appropriate type of inquiry but must also make some subsequent decisions as to exactly how that type of inquiry will be used in the particular circumstances.

Finally, accountability extends beyond the inquiry to control over the outcome of the inquiry. As indicated above, the various forms of inquiry vary with respect to public availability of their reports. While royal commissions normally publish their reports free from government control, Standing Committees issue public reports (although not always very informative ones), and statutory agencies normally issue public decisions or advice; neither task forces nor departmental and interdepartmental studies are subject to the same obligation to report publicly. As a result, to the extent that a politician wishes to control access to an inquiry's results, the latter two forms are more amenable to his purposes.

Political Dynamics

Each of the five types of public inquiries will generate a different political dynamic. By "political dynamic," we mean the relative influence of different participants, the diversity of interests participating, the allocation of the burdens of initiative and persuasion, the relative accessibility of the inquiry, the style of the inquiry, and related matters. This political dynamic will in many cases be directly related to the opportunities provided for participation in the inquiry. However, given the central role of participation as a characteristic, it is dealt with below under a separate heading.

Different forms of inquiry incorporate different degrees of diversity of interest among the participants. At one extreme is the parliamentary committee which has diversity inherent in its design as the opposition and minority parties are entitled to representation. While this representation does not as a rule permit them to control the committee's proceedings, it does provide them with a visible forum in which to articulate alternative points of view and to question and even obstruct the directions adopted by the government members. At the opposite end of this spectrum is the departmental study in which the participants are not normally viewed as representatives of any particular interest group. To the extent that the bureaucrats participating in the study represent any interests, it is likely to be the competing bureaucratic interests in the resolution of the problem. Royal commissions, depending on their particular design, can accommodate or avoid diversity of interest. Where the commission is headed by a single commissioner, interest groups are forced to participate by appearing before the inquiry rather than being included as members of the inquiry. However, where there are multiple commissioners, these commissioners can be selected to represent the range of affected interest so that these diverse interests are actually built into the structure of the inquiry. The degree to which these diverse interests are incorporated within the structure is likely to have implications for the type of recommendations and report that the commission will issue. For example, the Berger Commission on Northern Pipelines was headed by a single commissioner, whereas the Lysyk Inquiry on the Alaska Pipeline was a three-person inquiry, with a neutral chairman, a representative of the Indian people of the Yukon, and a representative of the white residents of the Yukon comprising its membership. The Berger Report announced a strong, uncompromising position on the MacKenzie Valley Pipeline, clearly choosing some interests (those of the native peoples, environmentalists, and others) over other interests (pro-development), mainly those of white northerners and the project's proponents. In contrast, the Lysyk Inquiry, in reaching its unanimous report, issued recommendations based on compromise, attempting to promote common ground among the competing interests, thus avoiding the need to make more tough choices among the competing interests than were absolutely necessary. Arguably, these different types of recommendations can be attributed in part to the internal political dynamics created by the two different structures, since the need to compromise is dramatically enhanced when commissioners who represent a diversity of views are bound together in a common task.

Thus, in considering the design of a commission or even a task force, the politician can influence the political dynamic of its work by determining whether or not to represent a diversity of interests (political, geographical, or regional) in its structure. The degree of flexibility permitted politicians in this task depends on the particular form of inquiry adopted, since parliamentary committees and statutory regulatory and advisory agencies are not subject to this type of

manipulation on an *ad hoc* basis, unlike royal commissions and task forces.

The relative influence of various interests will be affected not only by their membership in the inquiry but also by their access to it; for example, the influence of bureaucrats on the outcome of the inquiry is likely to be inversely related to the degree of independence accorded to the inquiry. Thus, while by definition bureaucrats will dominate and control the proceedings of a departmental or interdepartmental inquiry, they will have only limited opportunity to influence the outcome of a royal commission's work, except to the extent that the commission relies on staff seconded from the bureaucracy. Similarly, an agency outside the bureaucratic structure of the government is less subject to influence by bureaucrats than the normal departmental study. Thus, when a politician wishes to put some distance between an inquiry and his departmental staff, he will opt for an inquiry offering some degree of independence. In contrast, where he wishes to announce an inquiry but at the same time maintain the dominant position of his bureaucrats in determining the outcome, he will opt for a form of inquiry that will maximize their influence. The same general approach applies to other interests and their relative influence.

The political dynamic surrounding an inquiry will also be influenced by the style of the proceedings that it adopts. Thus an adjudicative mode, as opposed to an informal discussion or consultation, is likely to favour the influence of some interests over others, since some values are less conducive to being promoted through adjudicative procedures. For example, if, as is arguable, adjudicative procedures favour hard facts over soft variables, those bearing the burden of promoting the soft variables will be disadvantaged by the choice of an adjudicative proceeding.

Participation

Encouraging public participation in inquiries is essential to facilitating their function of serving as a forum for generating information, exchanging information, and educating relevant interests about new policy directions. Different forms of inquiry, however, offer very different opportunities for participation by affected interests. One of the often stressed advantages of royal commissions is the opportunities they may provide for public participation.[10]

Thus certain forms of inquiry provide the opportunity to "talk to the people" and to "hear from the people." At the same time, however, other forms of inquiry substantially diminish these same opportunities to participate. For example, a departmental study, or indeed an executive task force, offers no general invitation to affected interests to participate. The study or task force will decide, on its own initiative, who to talk to, in what way, and where. As a general rule, royal commissions are more inclined to issue a general invitation to participate. Similarly, parliamentary committees, while not bound to hear all affected interests, as a rule do provide opportunities for participation. Similarly, many regulatory and advisory agencies provide an open forum for participation by all affected interests. Indeed, some agencies (e.g. the CRTC), by providing funding support for poorly financed interests, actively encourage a diversity of representations [see, generally, Kane (1980), pp. 99-120; and Englehart and Trebilcock, 1981]. Similarly, some recent inquiries have adopted an analogous procedure in order to facilitate active participation by all relevant interests [Berger, 1977; and Lysyk, 1977].

The form of participation will also be relevant to the relative influence of the various actors; that is, to the extent that the inquiry is made more open and more readily accessible to all interests, the relative influence of those who would have had an opportunity to participate even with a less open form of inquiry is relatively diminished. Thus those interests with ready access to the processes of government are likely to favour forums that are less subject to open participation, while those less able to make their views known in the normal course of events are likely to be better off with a form of inquiry that solicits the views of a wide range of interests.

The degree of participation accorded interests in an inquiry is likely to have an impact on the visibility of the inquiry as well. Thus, as suggested below, to the extent that visibility is essential to the symbolic role of commissions, the type of participation afforded by the different forms of inquiry will be directly related to the politician's assessment of the relative symbolic value of each type of inquiry.

Visibility

The visibility of the various forms of inquiry varies, and this variation is likely to be a critical consideration in the politician's choice of instrument. Since visibility is directly related to the symbolic effects of an inquiry, the political decision maker must assess his objectives in creating an inquiry and then choose that form of inquiry best suited to his symbolic objectives.

A number of techniques can be used to increase the visibility of an inquiry, including the appointment of high-profile individuals to head the inquiry; the best choice of style of inquiry, in terms of its accessibility to the media and to interest groups; and the budget for travelling that it has been instructed to adopt. In

this regard, royal commissions offer the potential for very considerable visibility, while, at the other extreme, departmental and interdepartmental studies are likely to be the least visible. Task forces can fall anywhere between the two extremes. For example, the Task Force on National Unity was highly visible; yet a task force composed exclusively of public servants who report privately to the minister can be practically invisible. Parliamentary committees have considerable potential for visibility, particularly in light of the reforms adopted in 1968 to increase their effectiveness. Parliamentary committees also provide an opportunity for visibility to particular members, and to the extent that members see this as a means of enhancing their reputations, the visibility of the committee is likely to be correspondingly increased. Agency studies also vary across the spectrum of visibility; often, however, the constituting statute will direct some minimum openness, and thus visibility, for their proceedings.

The symbolic value of a politician's commitment to investigate a policy and to initiate a high-quality, "independent" study of the matter can also be enhanced through the appropriate selection of personnel to head the inquiry. Thus the frequent resort to judges to head inquiries can be viewed as an attempt by politicians to signal, at low cost to them, a commitment to integrity, independence, and fairness. While this may, over time, be at some cost to the judiciary as a whole, it undoubtedly provides the politician with a variable that he can manipulate to his advantage in designing a particular inquiry. This choice of personnel, of course, is not available to the same extent in the case of agencies and parliamentary committees, since these bodies have, at least in the short run, a fixed membership. Task forces and departmental studies, while *ad hoc*, cannot accommodate with the same ease the appointment of judicial personnel.

The symbolic value of an inquiry may also be influenced by the selection of its staff. To the extent that the politician wishes to emphasize independence, he is likely to want to turn to a form of inquiry that does not rely on staff drawn primarily from the civil service. Thus, again, a royal commission (or, in some cases, a task force) can offer greater opportunity for symbolic independence in undertaking an inquiry.

Timing

The various forms of inquiry have different time horizons and constraints. For example, the life of a parliamentary committee's inquiry is limited by the length of the Parliamentary session, while the length of an agency's inquiry is essentially in the hands of the agency itself. The duration of departmental studies is within the control of the executive and is thus virtually an infinite variable. With royal commissions, the executive may try to constrain the length of the inquiry by fixing a reporting date in the commission's terms of reference, but such constraints are notoriously ineffective.[11] The time constraints on a task force depend primarily on the degree of independence granted it by the executive.

Speed, or lack thereof, in an inquiry is a characteristic that politicians are likely to view differently under different circumstances. While a commitment to an early conclusion of an inquiry may be appealing to those interests promoting a given policy, the actual conclusion of an inquiry increases the pressure on politicians to implement the policy advocated by the inquiry. As a result, in an environment in which deferral of implementation is often prized as a means of saving resources for other tasks, a short inquiry may be the least attractive to the politician. If the politician seeks a relatively slow inquiry, however, he will not want to shoulder blame for that delay and will therefore likely turn to a relatively independent type of inquiry. He may also be tempted to instruct the inquiry to undertake a very thorough study of the policy area in order to ensure the impossibility of an early completion date. Conversely, for those inquiries for which the politician wants an early conclusion, he is unlikely to turn to a relatively independent form of inquiry, since it will, in the absence of unusual circumstances, be more difficult to control.

Costs

As stated earlier, the cost of an inquiry may be a relatively insignificant factor for the politician, since the dominant point of comparison in terms of cost is normally the cost of actually implementing a policy. Despite this general comment, however, there are some cost considerations that may influence the choice of instrument.

The real cost of the different forms of inquiries may not vary substantially, except with the intensity and quality of the study. In other words, whether a study is done by a royal commission, task force, or agency is unlikely to influence the amount of real resources required to achieve the same intensity and quality of study. What may vary is who bears these costs and what these costs appear to amount to.

In terms of who bears the costs, the different forms of inquiry impose different cost obligations on the participants. For example, an agency may demand that the participants produce most of the research and study through submissions, while a departmental study may bear the primary burden of study itself. Similarly, a royal commission may embark on a large

research program itself, while a parliamentary committee may play a decidedly more passive role.

Perhaps more important is the difference between real and apparent costs. By using resources that are not charged to the inquiry, in an accounting sense, the politician may be able to give the appearance of a very low-cost inquiry. For example, since members of Parliament are paid in any event, the cost of an inquiry by a parliamentary committee will appear to be very low despite the resources in terms of time used by the members. Similarly, the appointment of a judge to head an inquiry can usually be done at no accounting cost, as his salary will continue to be paid from other funds, just as existing departmental staff can be used to assist an inquiry at no apparent incremental cost. Thus, by utilizing resources that come at no accounting cost to the particular task, the politician may be able to give the appearance of a low-cost inquiry despite its real cost. To the extent that there is a differential in this regard among the different forms of inquiry, one would anticipate the cost consideration to influence the choice of instrument.

Reform Proposals

The range of different types of inquiries is so great that it extends through much of the governmental process. As a result, almost any proposal for organizational or structural government reform is likely to have some impact, directly or indirectly, on the dynamics of instrument choice with respect to public inquiries. Therefore, in this section we have not attempted to catalogue all such reform proposals; rather, we have selected a small number of reform proposals that are illustrative of the kinds of impacts that reforms will have on instrument choice.

The central theme developed in this section is that in an area where there is a high cross-elasticity of supply of instruments, as there is in the choice among the various types of public inquiry, reforms that are specific to a particular type of inquiry are likely to lead to considerable substitution away from that type of inquiry. That is, our model of the process of instrument choice posits that decision makers select a particular form of inquiry based on an assessment of the critical characteristics of that form in the context of the political demands for action concerning the policy problem. Most of these characteristics (e.g. accountability) are located along a spectrum and are available in different combinations through the different types of inquiries. Therefore, if a reform were to diminish or remove a characteristic of a particular form of inquiry that was valued by the decision makers, a decision maker would be likely to substitute a different form of inquiry that possesses that same characteristic.

The corollary to this theme relating to instrument-specific reforms is that for those types of reform which have general application to all forms of inquiry, the substitution effect among different forms of inquiry is likely to be modest, since the reform will have an essentially uniform effect on the characteristic in question. At the same time, however, such reforms may cause some substitution between inquiries as a class of instrument and the other major instruments studied in this paper.

Turning to the examples, the various proposals for reform of the system of standing committees is a good illustration of an instrument-specific reform. Standing committees have been maligned for engaging in weakly visible, poorly staffed, ineffective inquiries, tightly controlled by party discipline. Thus reform proposals have been made to strengthen committee staffs, to reduce the role of partisanship in the selection of committee chairmen, to diminish the role of party discipline, and to enhance the rewards for committee service [e.g. D'Aquino et al., 1979]. Whatever the intrinsic merits of these proposals, two implications appear certain. First, present resort to standing committees is undertaken by the government in light of, and not despite, the existing features of the committee system that the proposals seek to reform. Thus, in many situations, it will be because of the role of party discipline and the inadequacies of staff that the government will wish to refer a matter to a committee rather than some other form of inquiry. Therefore, proposals that reduce the degree of executive control run counter to a factor that in many circumstances is likely to have been a major determinant of the existing instrument choice. Second, to the extent that these reforms substantially alter the critical characteristics of the committee system (and it should be acknowledged that some observers remain skeptical on this point), one should anticipate reduced resort to the committee form of inquiry in those situations where tight executive control is important to the decision makers. Task forces and departmental and interdepartmental inquiries are likely to become relatively more attractive.

A second example is the reform movement directed at the mechanisms governing the political accountability of independent regulatory and advisory agencies [see Janisch (1979), p. 46, and proposals cited therein; and Royal Commission on Financial Management (1979), Chap. 5]. While these proposals all address political accountability for policy making, they vary from the elimination of

cabinet appeals; to directive powers; to the elimination of independent agencies; to procedural regulation of political inputs. Again, for our purposes, the merits of these proposals are not at issue; others are better qualified to stage the debate. What we wish to emphasize is that each of the proposals would alter a delicate balance of independence and accountability – a balance that varies from agency to agency, since the balance is set by the particular enabling statute. Thus to intervene in order to modify this balance and to do so by reforms that would apply to all such agencies would alter the government's perception of the attractiveness of resorting to these agencies as a form of inquiry. If independence (i.e. lack of accountability) is desired and the reforms introduce greater accountability, then royal commissions – the least accountable form of inquiry – are likely to be substituted. Conversely, if control is desired but is undermined by the reforms, forms of inquiry more susceptible to executive control may become more attractive.

A somewhat different group of reform proposals relates to the public funding of participation in inquiries [see Trebilcock et al. (1978), and references therein; (1979), Recommendation 10; and Englehart and Trebilcock, 1981]. In recognition of the problems of voluntary funding for collective action by thinly spread interest groups, numerous mechanisms for public funding support have been proposed. These have varied from the granting of cost awards before regulatory boards, to the institutionalization of consumer representation within agency structures, to the program funding of organizations representing thinly spread interests (e.g. Consumers Association of Canada), to tax deductions and credits for donations to such interest groups. While all of these proposals would increase public participation in at least some forms of inquiries, with consequential effects on the associated political dynamics and visibility identified above, the proposals vary in the extent to which they are instrument-specific. Thus a mechanism of cost awards before regulatory agencies would have an impact only on inquiries undertaken by standing regulatory and advisory agencies, normally governed by adversarial procedures. In contrast, tax deduction and credit schemes are not similarly constrained by the type of inquiry, and so they would have an effect on all forms of inquiry. Thus the anticipated substitution effect would presumably be much greater following the cost awards reform than following the tax proposals, and any gains achieved by consumer advocates through the adoption of a cost award mechanism would likely be at least partly dissipated by substitution away from those forms of inquiry, in the absence of similar reforms affecting the other forms of inquiry.

The final illustration of this general proposition relates to freedom-of-information legislation. Such legislation is normally of general application, attaching to all aspects of government except those specifically excluded on such grounds as national security or cabinet secrecy. Thus, unlike the reforms considered above, freedom-of-information legislation would avoid the substitution effects associated with instrument-specific reforms except to the extent that the decision maker is able to construct a form of inquiry that would fall within one of the specific legislative exclusions. Thus freedom-of-information legislation would likely undermine the secrecy advantages of departmental and interdepartmental studies and task forces, eliminating in large part this characteristic from the calculus of instrument choice.

Conclusion

The thrust of this chapter has been to argue that public inquiries are a policy output that in some cases would serve as a substitute for other outputs, including taxation, expenditure policy, regulation, and public ownership. Furthermore, we have argued that the utilization of public inquiries as an instrument would depend on the politician's assessment of the relevant characteristics of this instrument relative to those of the other major instruments. We acknowledge, however, that the cross-elasticity of supply between public inquiries and the other instruments is likely to be quite low other than in a temporal dimension.

In the latter part of the chapter, we argued that the cross-elasticity of supply among the various types of public inquiries is relatively high. Further, we identified a number of factors that are likely to be influential in determining the politician's choice of a particular type of inquiry. Finally, we considered briefly a number of current reform proposals relating to public inquiries, and we demonstrated that to the extent that these reforms are likely to have an impact on the critical choice variables they are also likely to cause some shifts in the selection of particular forms of inquiries.

5 Taxation, Expenditures, and Debt Management

This study is based on the assumption that many policy instruments are, to a not inconsiderable extent, substitutes for one another. This chapter is concerned primarily with the consideration of two policy instruments: taxation (including so-called "tax expenditures") and expenditures. These two general policy instruments, each of which may exist in a wide variety of forms, are, by definition, nonsubstitutable. Taxes, whatever their form, impose costs, although their ultimate incidence is often most uncertain; expenditures confer benefits, although the determination of the ultimate beneficiaries and the magnitude of the benefits, in terms of the satisfaction received, is also often most uncertain.

In the several analyses that follow, an attempt is made to "explain" policy choices in terms of the search for electoral success. As stated in the conclusion to Chapter 2, the individual motives of politicians that lie behind that search can be, and probably are, extremely complex. It is sufficient for us that, with the rarest of exceptions, the search for personal utility by politicians manifests itself, at least in the first instance, in the search for votes and, in particular, the support of the marginal voters in marginal ridings. Recall from Chapter 2 that the support of special interest groups is also important, often because these groups can facilitate (or obstruct) the search for marginal voter support through providing (or withdrawing) financing, publicity, and so on.

This chapter, as previously stated, is concerned primarily with two policy instruments: taxation and expenditures. This ignores debt management, including, of course, control of the money supply, not because the issue is unimportant but rather to reduce the inordinately complex problem of policy instrument choice to more manageable proportions. A few brief prefatory comments on debt management will perhaps suffice to assuage those who, maybe rightly, would argue that it is inextricably related to taxes and expenditures, and no less important.

Debt Management

The issuance of non-interest-bearing debt – money – at a rate in excess of the rate of increase of the output of goods and services, barring offsetting changes in the demand for holdings of money as an asset, result in an increase in the general level of prices. Ignoring the international transmission of inflation[1] – which is vitally significant for open economies such as Canada's – when governments outbid the private sector for real goods and services or make transfer payments using "newly printed" money, it is, in effect, imposing a tax on those holding "old" money and fixed income claims. Holders of marketable fixed income claims sustain a capital loss as interest rates on new debt instruments rise by the anticipated rate of inflation. For holders of non-marketable claims, such as pensions, the lump sum tax is equal to the reduction in the present expected value of the future stream of payments in real terms. The objection to this form of taxation stems primarily from the attendant inequities or, perhaps one should say, social disruption. (Most economists would accept the proposition that, at least over the longer term, the economy can, and will, adjust to any certain, constant inflation rate.) From the perspective of equity it is obvious that taxation by inflation is hopelessly capricious. Why tax those holding fixed income claims more than others? Although equity is in the eye of the beholder, the social consequences of inflation are obvious to all. Rapid, *unanticipated* inflation punishes those who have been prudent and rewards the prodigals. The middle class particularly, and renters generally, often become radicalized, usually in a fascist/corporatist direction.

Governments have succumbed to the temptation to tax, by debasing the currency, since the beginning of recorded history [Bird, 1979]. Some citizens, however, gain from inflation. Clearly, debtors are better off; in effect, they receive a capital grant. Those with bargaining power can seemingly raise their prices or wages as rapidly as the increase in the price level, and with no time lag, with the result that their real incomes are unaffected. Many suffer from a

"money illusion," so that when their nominal incomes rise they actually feel better off although in *real* terms their position may have deteriorated.

Because there are both winners and losers with inflation, "taxation by inflation" can be a politically attractive policy instrument, even if the electorate is under no illusions about the causes or effects. When the winners are marginal voters, such as the young and those with economic power, and the infra-marginal voters are the losers, such as the aged and the economically powerless, inflation is a *politically* efficient policy instrument. One might speculate that as the population ages, on average, and fixed income voters not only become proportionately more important but their opposition to inflation overwhelms their other policy concerns, they will become marginal voters swayed by this issue alone. Under such circumstances, political parties seeking election or re-election are likely to vie with one another as inflation fighters.

The issuance of interest-bearing debt can also be used to finance expenditures, of course. Consider the case where this policy instrument is used without inflation. Take the simplest situation: the borrowed funds are used to finance the construction of public facilities that provide a perpetual flow of services; the bonds issued are perpetuals; and the interest payments are financed by current taxation. Supposing the interest rate on the bonds were equal to the market rate (less a low-risk discount), the lenders would be neither winners nor losers. Whether the borrowers would be better or worse off would depend upon their valuation of the flow of services relative to the annual tax price. This would differ from voter to voter because of differences in preferences and the allocation of the tax burden. The real cost would be the opportunity cost of the goods and services used in constructing the facility at the time of construction. Presumably the decision to proceed with the facility would have been a consequence of the perception of the party in power that more marginal voters would perceive the facility as affording a net benefit than the converse. With the passage of time the preferences of the electorate could change, even if the government's assessment was accurate at the time of construction. Where this is the situation, taxpayers would be forced to transfer income to the lenders with no offsetting benefit. The borrowers would be losers; the lenders, neither winners nor losers.

It is more plausible to suppose that the facility has a shorter life. Imagine that the life of the asset acquired were only one year – a current expenditure. Assume further that the expenditure is financed by the issuance of a perpetual bond. Once again, the real opportunity cost is the other goods and services currently forgone; and, once again, the lenders are neither gainers nor losers. In essence, they obtain the same return as they would have received had they invested in a private sector project of equivalent risk. The situation for taxpayers is radically different, however. The voters would be forced (perpetually) to sacrifice current consumption through taxes destined for the lenders as interest payments. Because the electorate changes for demographic reasons, among others, those enjoying the benefits in the year in which the public goods and services were provided would in effect shift the burden forward in time to subsequent generations of taxpayers.

The immediate political advantages are painfully obvious: marginal voters with short time horizons (discount rates higher than the interest rate) feel better off at the time, when their current consumption of public goods and services is increased at the expense of their future consumption (assuming that they value their consumption of public goods and services at least as highly as they value the consumption forgone). In addition, uninformed voters can be offered short-term, seemingly costless benefits – particularly just before an election – by the party in power. This strategy is extremely rational politically, for it spreads the costs through time – with uncertain incidence. Other voters may or may not perceive themselves as future losers. No one knows with certainty how the extra revenues will be raised. How much do they discount the implicit burden being imposed on future generations? The costs, in other words, are so diffused that it is difficult to imagine other marginal voters being swayed to vote against the governing party on this issue (particularly when there are many issues on the agenda).

The question of voter memory is relevant in this context. After the election, other things being equal, taxes will rise by the additional interest cost. Depending upon how efficiently the benefits were targeted, these interest costs may slightly offset the benefits of the winners. (Recall that the debt is not amortized.) The contemporary losers will be more or less aware of this slight loss, for the increase in taxes on this account is most unlikely to stand alone in the package of tax changes that follow. Even if they were aware of this loss when the tax increase was imposed following the election and did identify the cause as the party in power, how much weight would the marginal voters give to this factor in the next election? Would they remember what happened or why? Presumably those with a high discount rate have both a short time horizon *and* a short memory. Should this be true, the marginal voters received benefits that "bought" their votes for the incumbent party; yet there was little or no political cost. Whatever the

views of the infra-marginal voters at the time of the next election, they are, of course, of little concern to any of the parties now.

To the extent that the political strategy previously described is solely the consequence of the higher discount rates for the marginal voters, it would not be proper to say that it was based on the creation of an illusion. In optimizing the likelihood of a party's re-election, the "spend now, pay later" policy would simply reflect, in the public sphere, the personal preferences of the marginal voter group. This is not to deny that it would impose losses on infra-marginal voters with lower discount rates. The same would be true if the political party were to use the method described to provide current benefits to some marginal voters, whatever their discount rate, and were somehow able to impose the interest costs solely on the infra-marginal voters, thereby leaving other marginal voters unhurt. A more likely scenario, however, would be one where some marginal voters would be granted a current benefit from the party in power; yet it would simultaneously create the erroneous impression that no marginal voters would be faced with offsetting increases in their taxes later on.

From a political point of view, this strategy could be extremely efficient. The funds could probably be directed towards the target group with few spillovers, and the costs could be spread among many taxpayers over a significant period of time. The straight administrative costs would not be much affected, because debt issuance *per se* requires relatively few resources. From an economic efficiency point of view there could be a social cost if the public goods or services financed by borrowing were to yield current social benefits (somehow defined) that were less than the future private goods and services forgone, because of the requisite perpetual tax increase. Furthermore, the subsequent increase in tax could create allocative distortions, as individuals and firms altered their behaviour to maximize their *after-tax* incomes.

Taxation

For the present purposes, a tax will be defined as a compulsory payment to government by a (natural or legal) person, as prescribed by law. Under this definition compulsory "contributions" for insurance and pension schemes are taxes, as are licence "fees." User charges that do not exceed the costs of providing a facility (e.g. an airport landing tax or highway toll) are prices rather than taxes. The cross-subsidization implicit in many government-regulated rate structures (e.g. telephone rates that charge urban users more than cost to finance services to rural subscribers at rates below cost) can be thought of as taxes imposed on some and subsidies to others. Nevertheless, because they do not involve payments to governments as an intermediary, these implicit "taxes" are not defined as taxes for our purposes.

Table 5-1 lists the principal federal and provincial taxes and the revenues derived from them in 1975-76, the most recent date for which comparable data are available.

Table 5-1

Consolidated Government Gross General Revenue, 1975-76

	Total amount collected		
	Federal	Provincial/ local	Total
	(Per cent)		
Tax revenue:			
Income			
Personal	37.0	20.2	28.9
Corporation	16.7	6.6	11.8
Interest, dividends, etc., going abroad	1.4	—	.7
Other business taxes	—	2.4	1.1
Real and personal property	—	15.9	7.6
General and other sales taxes	14.0	13.2	13.6
Motive fuel taxes	1.2	4.8	2.9
Customs duties	5.5	—	2.9
Estates, successions, and gifts	—	.5	.2
Health insurance premiums	—	2.8	1.4
Social insurance levies	5.7	2.7	4.3
Universal pension plan levies	4.2	1.7	3.0
Oil export tax	3.1	—	1.6
Other	—	.6	.3
Total tax revenue	88.0	71.2	80.4
Nontax revenue:			
Natural resource revenue	.1	8.2	4.0
Privileges, licences, and permits	.1	3.3	1.7
Sales of goods and services	1.8	5.4	3.5
Return on investments	6.3	10.0	8.1
Other	2.8	1.9	2.4
Total nontax revenue	11.1	28.8	19.6
Total revenue from own sources	100.0	100.0	100.0

SOURCE Canadian Tax Foundation, *National Finances: 1978-79* (Toronto: Can. Tax Foundation, 1979), p. 30.

Efficiency in Taxation

Kenneth Eaton, a long-time principal tax expert in the federal Department of Finance, was renowned for his pragmatism and his wit. In response to a question concerning the reason why the corporate income tax had been raised, reputedly he snapped back [1966]: "when you want to raise money you go where the

money is." Although that statement hardly explains the mind-boggling complexity of the existing tax structure in any advanced country, it highlights a reality that is so obvious that it is often overlooked. At one time or another, in some place or another, a tax has been imposed on anything associated with valuable resources. The tax on the number of windows in British homes in the eighteenth century provides a good example. The more windows, the more wealthy the owner, generally speaking. The administrative costs of counting the windows was trivial; compliance costs were low. Had it not been for the costs of avoiding the tax by bricking up the windows, it would have been an efficient tax in an "administrative compliance" sense.

With rare exceptions (e.g. the now-defunct federal and provincial death taxes), a government's administrative costs of tax collection are extremely small compared with the revenues raised. In most instances it is recognized that for every additional dollar spent on tax enforcement, the revenue raised is a significant multiple of one. This being so, it seems most unlikely that administrative efficiency is an important determinant in the choice of particular taxes as policy instruments or the weight placed upon them.

The same is true of compliance costs. These costs, as a percentage of the proceeds, undoubtedly vary substantially from tax to tax. The manufacturer's sales tax (currently 11 per cent) is a great revenue raiser. The compliance costs per dollar raised are undoubtedly lower than those for the retail sales tax. And the property tax probably has a much lower compliance cost than the manufacturer's sales tax. Personal income tax compliance costs for millions of taxpayers are extremely low – a few hours per year. For others, the legal and accounting expenses are high, but deductible. The same is true for corporate income tax. The high compliance costs for some industrial and corporate taxpayers are, in a sense, self-inflicted wounds; the high costs arise because of the substantial advantages of tax avoidance. Moreover, it would be a simple matter to reduce even these compliance costs by withdrawing a maze of concessions – a course of action that would lead to much louder protests than the high compliance costs generate.

Inordinately high compliance and enforcement costs undoubtedly explain in part the absence of some provisions in the *Income Tax Act*. The nontaxation of capital gains on an accrual basis is a case in point; the nontaxation of the imputed income accruing from owner-occupied homes is another. One might wonder, however, whether either would be included in the tax base even if compliance and enforcement were simple and costless; the political costs would be extremely high.

Some forms of taxation provide a rational policy instrument, from a political point of view. Exemptions, deductions, and concessionary rates, termed "tax expenditures," can be used to attract marginal voters, and their cost can be spread so widely, hitting so many voters, that organized opposition is difficult. The costs (as distinct from benefits) can also be hidden, at least in part, and additional revenues can be raised surreptitiously and hence at no political cost. The tax system, in the hands of a master politician, can also be deployed in such a manner that those whom some uniformed marginal voters wish to have "punished" can appear to be punished while, at the same time, the supposed victims, if they too happen to be marginal voters, can be left whole, possibly even accorded net benefits.

It is generally acknowledged by public finance theorists that, with the possible exception of an unexpected lump-sum tax, the imposition of *any* tax leads to *some* behavioural adjustment [see Harberger (1974), Chaps. 1, 2, and 8]. In order to minimize the tax that, in essence, constitutes a change in relative prices, taxpayers modify work/leisure, consumption/savings and savings/investment choices. Conceivably these adaptations can increase allocative efficiency when they offset, in whole or in part, misallocations resulting from market failures of one kind or another. Conceivably, too, misallocation caused by one feature of the tax system can be purposely offset by another feature or by the use of another policy instrument. With these exceptions, however, taxation is often conceived by economists to be a source of economic inefficiency. In some fundamental way this is a rather strange conclusion. Unless property rights are maintained, a market system cannot exist. And without markets allocative efficiency, as the term is usually used, has no meaning. Yet the main defence of property rights in the final analysis requires security services that presumably must be financed through taxation in one form or another. The reduction in efficiency as a result of the requisite taxes must be weighed against the increased efficiency resulting from the public goods expenditures financed by them. Minimum government, would, of course, involve minimum taxes and hence would result in minimum efficiency losses. All of this ignores, however, the role of government as a redistributor of income and wealth. Transfer payments are the single most important expenditure and hence are the principal source of the distortions (inefficiencies) created by taxation.

Perhaps a more sensible approach to the question of the economic-efficiency impact of taxes is to

accept the proposition that the objective is to minimize the distortions resulting from taxation. Some taxes, such as the tax on windows mentioned above, impose a dead-weight loss: many windows are bricked up, the revenues approach zero; and the wealthy are greatly inconvenienced, to no purpose.

Although the question is by no means resolved, most public finance theorists would probably acknowledge that the use of the tax system (together with transfer payments) as a means of reducing interpersonal disparities in income/wealth necessarily entails significant trade-offs. In particular, a reduction in inequality could, and probably does, reduce the growth rate. There is no consensus about the magnitudes involved in this trade-off. Moreover, the preferences of economists as to how much of one should be sacrificed to obtain more of another are of no special significance.

More disputatiously, it might not be too far off the mark to suggest that many economists would accept the proposition that many of the tax provisions that purport to reduce income/wealth inequities result in significant dead-weight losses. That is to say, in the long run the disparities in the distribution of income/wealth are not significantly reduced, but the rate of growth of output is.[2] Here, too, evaluation is deficient. Even if there were such a dead-weight loss, one might speculate that without the general perception of government actions that purport to reduce income inequities it would be more difficult, and perhaps impossible, to enforce existing property rights. The widespread perception of permanent gross inequities enforced by government without any seeming attempt to reduce them is the stuff of which revolutions are made. The political rationality of a system that appears to be highly redistributive is obvious when universal suffrage is the rule. Many marginal voters are relatively poor and ignorant.

Many regulations can be looked upon as implicit taxes. The minimum wage laws, in effect, tax employers of cheap labour and require them to distribute the proceeds to those workers who remain employed. Many agricultural marketing boards control farm output in order to raise prices and hence farm incomes. In essence, this is equivalent to a kind of excise tax on farm produce, with the proceeds distributed to the farmers in accordance with their output. Prohibitions are, in a sense, taxes (fines) on those who do not obey the rules. And just as taxes, in the ordinary sense of the term, distort the allocation of resources, so do regulations, other than those that correct market imperfections. An assessment of the relative inefficiency costs of regulations and taxes must be based on individual studies of particular regulations and taxes [Bernstein and Green, 1981].

Illusion in Taxation

The difference between illusion and reality is, of course, in the eye (and mind) of the beholder. Many individuals can simultaneously have quite different perceptions of the same phenomenon. For our purpose it is assumed that what most public finance theorists perceive a tax to be and/or do is "reality" and that all other perceptions are "illusions." Although hardly intellectually satisfying as a definition, it is difficult to conceive of another one suitable for our purpose.

One way to approach this topic would be to discuss the illusionary aspects of every tax. This would be extremely ponderous and repetitious. Another way to proceed is to consider some of the kinds of illusions and to illustrate them by drawing examples from many different types of taxes. The latter approach is adopted here.

Tax Awareness

There is an old saying: "What the eye doesn't see the heart doesn't grieve about." And political parties certainly do not want to do anything that would give marginal voters anything to grieve about. Rather, they seek to appear to be able to give benefits to marginal voters at no cost – preferably at little cost to any voter but certainly at little or no cost to other marginal voters.

It should be noted that real benefits *can* be provided at little cost [Bernstein and Green, 1981] when the efficiency of the allocation of resources can be improved, for example, by reduction in waste through the stringent application of competition policy. (But even the enforcement of competition policy requires some resources. These costs must be deducted from the gross efficiency gain.) Rather than reduce such inefficiencies, governments more often create inefficiencies (e.g. by regulations restricting entry) and then they correct them by, for instance, tariff reductions.

Perhaps the manufacturer's sales tax is the most important example of a tax that raises a substantial proportion of all federal revenues and yet is unknown to most voters. Most tax experts would readily agree that it is probably the worst major tax in existence in this country, from a technical point of view. It involves a host of complex and arbitrary distinctions to accommodate seemingly idiosyncratic exemptions. Rates have to be adjusted more or less arbitrarily for many firms, because some firms are integrated vertically from raw material extraction to retailing while others are involved in manufacturing only – the intended tax base. For firms in the latter situation, determination of the tax liability is straightforward; for firms of the former type, the value added by non-

manufacturing must somehow be exempted from tax. Furthermore, the reader is invited to consider the complexities involved in exempting exports of manufacturing goods while ensuring that imports do not have a tax advantage. All in all, the tax is an exceedingly messy affair with a frighteningly large number of potential opportunities for administrative arbitrariness and abuse. Moreover, while the tax may have made some practical sense in earlier times when there were only a few manufacturing firms in Canada and marketing channels were more straightfoward ("go where the money is"), most economists would agree that to tax manufactured goods and not services leads to a misallocation of resources, particularly now that services constitute well over one-third of national output.

Although the technical weakness of the MST are enormous, its political strengths are correspondingly enormous. The tax is buried in the prices paid by retailers (or perhaps in the lower wages for workers employed in manufacturing or in the prices received by suppliers of materials and equipment). The size of the manufacturing sector is correspondingly smaller. As long as the value of the sales of domestically produced manufactured goods increases, revenues rise without increasing the tax rate. Because many firms are special cases, for the convoluted reasons previously mentioned, discretionary decisions on the size of a firm's tax liability are close to being the rule rather than the exception. One can imagine the temptations faced by ministers when making decisions about marginal cases where they may affect marginal voters directly or indirectly (e.g. in the case of local employment or a party contribution from the corporation).

The tariff (customs duties) is another major tax about which there is little taxpayer awareness because it is hidden in the prices of the goods they buy. In this instance, the principal purpose of the tax is not to raise revenues – unlike the situation that prevailed in the post-Confederation period – but to protect Canadian producers. As is well known, many of these domestic firms are foreign-owned and exist in Canada simply as a way of avoiding the tariff. The beneficiaries are specific and aware; the costs are usually dispersed and little recognized (an excellent political instrument). The economists' pleas for free trade have gone unheeded for well over a century, although the average level of tariff protection has declined. Whether this reduction in explicit protection has been offset in whole or in part by increases in nontariff barriers is a moot point.

Although more subtle, the method of collection can reduce taxpayer awareness and thus, to a degree, hide the tax and create the illusion that it is less than it is. Consider the personal income tax. The vast majority of taxpayers are employees. Employers are required by law to deduct, at source, the personal income tax liabilities, unemployment insurance "contributions," and the Canada Pension Plan (or Quebec Pension Plan) "contributions" of their employees. There are usually other deductions too: company pension plans, OHIP (in Ontario), Blue Cross, and more. Most employees probably consider their "take home pay" as their income. Would it not be surprising if employees were less aware of the taxes they pay because of withholding? To put the matter another way, would they not be much more aware of the magnitude of their tax liabilities if they had to write a cheque covering the year's taxes as a lump-sum payment to the Receiver General at the end of the fiscal year? Indeed, because the system in place overwithholds for most taxpayers, the majority receive a *refund* at fiscal year end. Instead of being outraged at the fact that they have been forced to make a non-interest-bearing loan to the government, most rejoice on receipt of the refund. Those, like President Reagan, who wish to move towards minimal government have said, as he has done, that "taxes should hurt."

Individuals with business or professional income are required to pay quarterly installments. Although the amounts are no doubt larger and the avenues for avoidance greater, is it not plausible that if, by some magic, the tax were automatically withheld and the quarterly cheques not required, the tax awareness (and hence the hostility) of this group would be reduced?

Some individuals pay their property taxes as part of a monthly payment that includes principal and interest to their mortgagees. It would be revealing to survey whether such individuals are aware of, or incensed about, their property taxes as those who pay directly on an annual or quarterly basis.

Tax strategems of the kinds we have discussed are not the only means by which a party in power is able to impose substantial costs on the electorate without their awareness. Regulations can be used to the same effect. How many consumers are aware of the impact of agricultural marketing boards, highway transport restrictions, and professional licensing on the price they pay for goods and services? How many urban telephone subscribers are conscious of the fact that the rates they pay are subsidizing the services for rural users by dint of regulation? Or that the charges for toll-calls implicitly subsidize local monthly rates, also by dint of regulation? Indeed, one can argue that even the most elusive taxes are less hidden than most regulatory costs and that the benefits can be more precisely targeted on marginal

voters. But governments do need money; regulations are no substitute for cash flow.

Hidden Increases

In 1975 the federal government introduced partial indexing of the personal income tax – a proposal touted by Opposition Leader Robert Stanfield in the previous election. By this measure the Government reduced the income elasticity from about 1.4 to 1.0, plus or minus 0.1 [Dept. of Finance (1978), p. 94]. Previously a 10 per cent increase in total money income increased the take of personal income tax by 14 per cent. After indexing, revenues increased roughly *pari passu* with income. In the late 1960s and early 1970s significant rates of inflation prevailed. Money income increased rapidly, and the progressive rate structure meant that additional money incomes were taxed at ever higher rates. The effective rate of tax on real income increased. The resulting increases were largely politically costless. Revenues increased dramatically. They "burnt a hole in ministerial pockets."

Over the endless protests of the Department of Finance, these windfall revenue gains were spent. Moreover, some of the expenditures represented commitments to programs not easily withdrawn. The adoption of partial indexing of personal income tax (PIT) was bitterly resented by the provinces because it also reduced the rate of increase in *their* revenues from this source.[3]

Indexing was certainly a major factor giving rise to the recent large federal deficits – deficits that are now, rightly or wrongly, inducing at least some fiscal restraint.

The pre-indexing situation provides a good illustration of a politically costless (for the most part) revenue-raising technique. The administrative and compliance costs of such a technique are zero. From the point of view of economic efficiency there is nothing to recommend it. Those with bargaining power are encouraged to increase their prices to sustain a rising real after-tax income. The pre-indexing effects of ever higher rates are probably perverse: the revenues are not raised in an even-handed way; and horizontal equity considerations are violated.

If inflationary increases in tax revenue without indexing were so attractive politically, why did the federal government adopt partial indexing? Does this event not constitute a counter-example of the hypothesis that politicians maximize the likelihood of their re-election? The full story is not yet in the public domain. But two facts can be pointed out in a speculative vein: the principal advocates of indexing within the Ministry at the time were John Turner and Simon Reisman, Minister and Deputy Minister of Finance, respectively. They had everything to gain from the introduction of indexing. First of all, they would both become heroes with their own clientele. Second, the (unsuccessful) arguments for expenditure restraint would be no longer necessary: as the growth in the flow of politically costless funds subsided, the internal demands for more expenditure would gradually abate because the political costs or explicit tax increases would be obvious. Expenditure control, for which they had fought long and hard, and unsuccessfully, would be facilitated.

Although the hypothesized motives of the Minister and his Deputy seem clear and reasonable, why would other ministers acquiesce? The answer seems to be, and it is attested by the subsequent uproar among them when the full consequences of indexing became apparent later, that they were not fully apprised of the implications of the proposal when they accepted it in Cabinet. Whether the subsequent resignations of the two men were related to this incident in any way can only be a matter of speculation. Did they resign partly because they had done it? Or did they do it because they intended to resign? Or was it unrelated?

Expression of Concern, or "Symbolic Politics"

When marginal voters are concerned about a problem, the competition among political parties leads them to vie with one another in the first instance to assert their concern. With sufficient competitive pressure they may even evince concern through concrete policy action that purports to ameliorate the problem. The income tax is replete with examples of provisions that seem to demonstrate concern for some types of persons or for persons in special circumstances. These provisions in the *Income Tax Act* are almost invariably rationalized on equity grounds: "equal treatment of equals requires appropriately different treatment for persons in different circumstances." [For a discussion of the horizontal-vertical equity issue, see Volume 1 of the Report of the Royal Commission on Taxation, 1967.] But what is a "relevant" circumstance and what is an "appropriate" difference in tax treatment? The "answer" is necessarily in the eye of the beholder. Although one would not want to suggest that the typical politician is less concerned than other mortals with the realization of horizontal equity within the tax system, it would not seem implausible to suppose that the search for marginal votes explains the existence of many concessionary provisions. And once such a provision has been introduced to sweeten a budget, especially just prior to an election,

it is extremely difficult to withdraw. Politically it is certainly bad not to show concern for a problem (group); it is infinitely worse to suggest that the party once had concern about a continuing problem but lost it, as evidenced by the withdrawal of a concession. If concessions were more effectively targeted than usual on problem areas, one would be less inclined to believe that the competition for votes was an important determinant of those put in place.

Examples abound. Special exemptions for the aged are provided in the personal income tax that are more valuable to the aged wealthy (e.g. the E. P. Taylors of Canada) than to the aged poor. The same holds for dependant exemptions. To reinforce the point, income-related refundable tax credits would be much more efficient if the ostensible purpose were the real purpose. For example, suppose there are three individuals – one with zero taxable income, one with income taxed at a 10 per cent marginal rate, and one with income taxed at a 50 per cent marginal rate. Suppose also that there were a basic personal exemption of $2,000. In terms of taxes saved, this is "worth" zero to the first individual, $200 to the second, and $1,000 to the third. With a refundable tax credit of, say, $500, the first would receive $500, and the other two would obtain equal absolute tax reductions of $500. Obviously, the refundable tax credit system, unlike the exemption, provides a greater *relative* benefit to those with low taxable incomes.

There are concessions supposedly related to the special circumstances of particular industries. Farmers are exempt from provincial gasoline taxes on the fuel used in farming. A generous portion of their household expenses are also deductible. The value of personal consumption of own produce is not included in income. Generous income-averaging provisions are available. There is no deemed realization of capital gains on death or transfer under some circumstances. All of this is done in the name of "maintaining the family farm." The fact that rural ridings, at least at one time, had a disproportionate weight in parliamentary representation might conceivably be a factor too. The Ontario amusement tax is waived on the box office receipts of all "Canadian" theatrical performances. With one fell swoop, this pleases the industry, nationalists, and elite supporters of the arts. And the revenue loss is relatively small. Only rational tax idealists are disconcerted – a group that carries little political weight.

Market imperfections provide another rationale for special treatment. In principle, these provisions do not constitute concessions. Rather, they purport to offset, in whole or in part, inherent barriers to the efficient allocation of resources. These include: capital market biases against new firms because of the obvious lack of information concerning past performance and hence high information costs for potential investors; the inability of firms in some industries to pool risks, thereby inhibiting risky ventures; the impossibility of fully capturing the benefits from successful R & D expenditures through patents because of enforcement difficulties. Most economists would take the position that to ignore these problems would be unsound. And special provisions in the *Income Tax Act* may be the most efficient means of increasing economic efficiency.

It is difficult to believe, however, that many of the present provisions were incorporated for these technical reasons rather than for politically expedient reasons. Some of the provisions pre-dated the development of the theory that can now be deployed to rationalize them (in principle). Perhaps those responsible for the decisions to include them were highly intuitive. More likely they were simply responding to special interest pressures and showing the requisite concern. A few illustrations must suffice.

Lower tax rates for new corporations can be rationalized in terms of the capital market barriers faced by new ventures where the principals have a low credit rating. As the system now functions, an extremely wealthy individual can be the principal (sole) shareholder of a plethora of "small" corporations and still obtain the concessionary corporate tax rate for each of them.

To encourage risk taking, capital gains are taxed at half rate and only upon realization. A more efficient incentive would be to tax capital gains in full and allow the full deductibility of capital losses against other income, both prospectively and retrospectively for an indefinite period. The *Act* seeks to prohibit full deductibility of losses from income presumably because the larger refunds would be politically embarrassing. Wealthy taxpayers might receive large rebates and be tax-free for decades. In this event the losses are often "sold" and the result is approximately the same as with full deductibility. But a blind eye is put to the telescope. One would have to be extremely naïve to believe that the taxation of capital gains at half rate reflects a concern for the market failure problem rather than a concern for highly influential interest groups who, on balance, would be taxed more heavily under a full-taxation-of-gains/full-deductibility-of-losses approach.

Regulations can also be used, and are, to convey the concern of a political party, as can expenditures such as demogrants, and Commissions, such as the Mcdonald Commission of Inquiry [1981] into the wrongdoings of the RCMP; public ownership of Petro-Canada is yet another example. The instruments are

not, however, perfect substitutes when it is necessary to express concern about particular problems. Tax concessions would hardly assuage public concern about police illegalities. The RCMP is already a government agency. Increased expenditures on improved police training and more regulations might serve the requisite purpose if this Commission of Inquiry were to report serious problems. If this hypothetical result of the inquiry were to emerge, politicians would have to show their concern to the then concerned electorate.

Exaggerated Costs

A significant number of voters apparently have the same attitude about two phenomena. They believe that 1/ personal income should be taxed relatively more heavily, the higher the income of the individual, to reflect an increased "ability to pay"; and 2/ corporations should be taxed because they are "rich" and/or "powerful." A political party that did not seemingly acquiesce in the face of these attitudes would be in danger of losing the support of a significant number of marginal voters. The New Democratic Party rallies its members with speeches replete with "corporate bashing." The idea that a corporation – a legal form of organization (as distinct from its individual shareholders, employees (including managers), and customers) – has an ability to pay, in the sense of making a sacrifice or bearing a burden, is obviously wrong. Nevertheless, the view is widely and strongly held. And there is no doubt that using the corporation as an agent in collecting taxes is efficient in the narrowest sense of the term "efficient."

Although it would take a book (at least) to make the point persuasively, it can be argued with considerable plausibility that both the progressive rate structure of the personal income tax and the whole of the corporate income tax are, to a significant extent, nominal – illusionary.

Some, like Blum and Kalven [1953], make a case for a flat rate of 15 to 20 per cent on a broader base. Appearances are deceptive. Some general points can be set forth in support of this proposition:

1 Probably most voters believe that those who literally pay the tax also bear the tax, not only in the short run but in the long run. This is a totally false presumption. It ignores the possibility that individuals with bargaining power can adjust to higher income tax rates by demanding increases in their salaries, fees, or fringe benefits. (It is sometimes argued that if individuals – or, more properly, groups – have bargaining power, why do they wait for an increase in the tax rate before they exert it? The "answer" is that attempts to increase real after-tax income relative to others are resisted more strongly than those that *restore* relativities.) It ignores possible adjustments in work effort and techniques for obtaining income in nontaxable form. It ignores the opportunities for international mobility. As far as the corporation is concerned, it ignores the ability of investors to reduce the rate of capital invested by corporations until output falls and prices rise and the previous after-tax rate of return is restored. Similarly, it ignores the possibility of shifting, over time, the tax backward to labour and other inputs through lower prices. Similarly, it ignores the opportunities available for diverting investment to other countries with a more favourable tax climate.

2 To a lesser extent, most voters are not fully aware of the multitude of avenues for tax avoidance, or postponement, that are available to upper-income individuals and corporations. Nominal rates and effective rates are not the same, with the latter being much lower than the former for the majority of persons – natural or legal. To name only a few:

for individuals,

- deductibility of pension savings up to a generous limit,
- "expense account" living,
- income-averaging contracts,
- tax shelters, and
- deferral of capital gains;

for corporations,

- accelerated depreciation,
- immediate expending of R & D (at least partially a capital expenditure),
- investment tax credit, and
- dividend tax credit for shareholders.

To argue that the progressive rate structure of the personal income tax and the corporate income tax are, to a significant degree, nominal is not to argue that the removal of either would have no effect. Clearly some (a few ill-advised or unlucky) upper-income individuals do face high marginal rates. With a proportional income tax with the same yield, their work/leisure and consumption/saving choices probably would be affected, as would their investment decisions. How significant would this change be in the overall picture? Hardly noticeable, unless one were to believe that their relatively few additional hours of work, savings, and investment would have magical powers associated with innovation and risk taking. The withdrawal of the corporate income tax (except perhaps as a withholding device) would no doubt result in an immediate jump in share prices (the important complexities of foreign ownership and foreign tax credits for Canadian corporate tax are

ignored here) with an obvious and significant one-shot effect on the distribution of money and wealth. Corporate form investment would be stimulated at the expense of other forms until after-tax rates of return were again roughly equalized among them. Thereafter the rate of growth in output would stabilize once again. Whether that rate would be higher or lower would depend, in large part, upon the impact of the other tax increases necessary to maintain revenues and the effects of the resulting redistribution of wealth and the removal of the corporate tax on personal and corporate savings, respectively.

It would take us too far afield to examine in any detail the alternative means by which the same or more income/wealth distribution could be achieved at a lower opportunity cost. A proportionate income tax for those above some income level and a negative income tax (income-related transfers) for those below the zero tax point have been much discussed [Rea (1974), p. 23]. Under such a scheme the disincentive problem is shifted from upper- to lower-income individuals. As for the large pools of capital held by some corporations, and the actual or potential political threat that they represent in the minds of some, it is difficult to imagine any tax solution. To the extent that highly capital-intensive production and/or marketing methods and/or vertical and/or horizontal integration are associated with least-cost output and innovation, greater domestic and/or foreign competition, where feasible, would seem to be the "answer." And there is always public ownership or regulation.

From the perspective of this study, however, the point is that although personal income tax progressivity and the existence of the corporate tax almost certainly have had some perverse effects on the allocative efficiency of the economy, those effects may well be less than the nominal tax structure would suggest to the uninformed observer, who is unaware of the avoidance opportunities buried in the fine print of the *Act* and its attendant *Regulations*.

In terms of the political system, the two features of the tax structure that we have been discussing in this subsection are highly rational. The political party can appear to many to be tough on the wealthy and the powerful while simultaneously providing concessions to the few that greatly soften the adverse economic impact of the nominal structure and reward some marginal voters by greatly reducing their tax costs. The fact is that, ignoring all international considerations, the corporate tax is ultimately borne by all of us as consumers and by many of us also as workers and not only by shareholders and managers. This is a politician's dream come true. Substantial revenues are obtained, and those who, in the long run, bear the burden are, for the most part, unaware that they do so. The persistence of the illusion is perhaps explained by rational ignorance – a concept discussed in Chapter 3 – for the analysis of tax incidence is not simple, and understanding it is unlikely to profit the individual who invests in obtaining that understanding.

Nontax instruments can undoubtedly be used to create the impression among the ill-informed that the costs are being imposed on unpopular organizations or activities are significantly greater than they are; indeed, some may be benefits in disguise. Rate regulation of utilities, on a guaranteed rate of return basis, provides an example. So do stringent environmental rules that are weakly, if ever, enforced. Self-regulation of occupational groups can serve a similar purpose in appearing to impose a burden of "professional standards" while in fact conferring higher incomes derived from restrictions on entry. It is interesting to contemplate a situation in which the income of certain individuals is thus enhanced and then apparently taxed at high marginal income tax rates, when in reality the effective tax rate is much less because of tax shelters and similar concessions not available to employees. Moreover, many employees are not aware of the existence of such shelters and concessions.

The Beginning of the End of Some Illusions

The provision of a benefit to marginal voters by means of a tax concession (e.g. a tax expenditure) had, until very recently, four distinct advantages relative to a direct expenditure:[4]

1 Once enacted into law, a tax expenditure is in force until the law is amended, unlike non-statutory expenditures that must be voted each year. When the beneficiaries are not thought to be especially deserving (e.g. petroleum companies) by most voters, this is advantageous for the beneficiary because the concession quickly drops from public scrutiny.

2 This is reinforced by the complexity of the legislation. It endures that, except for professionals in the field or those especially affected, all but the most intrepid are deterred from understanding, much less assessing, the concession.

3 Until the last few years no systematic attempt had been made to estimate for Canada the revenue forgone as a consequence of particular tax concessions. This had the effect of down-playing the obvious question: Are the benefits, economic or political, worth the candle?

4 Finally, although estimates of the value of the present tax concessions are now available [see

Doern and Maslove, 1979; Smith, 1979; and Government of Canada, 1979], it is still extremely difficult for objective outside analysts to assess their economic effectiveness. The question is often technically difficult, and the relevant data for analysis are usually not in the public domain. Whether publication of the estimated revenues forgone will increase the demand for evaluation of the multitude of concessions remains to be seen. If it were to do so, one of their political advantages would be lost: the opportunity to grant large favours by stealth.

The barriers to change will be formidable, however. Analysis of the effectiveness of the concessions will, perforce, be highly technical. Will it be "translated" and communicated to the "losers" by the mass media? In addition, the "free-rider" problem will make it difficult, or impossible, for the multitude of "losers" to get organized and to put enough pressure on government to more than countervail the pressure of the usually well-organized "winners." In short, will knowledge *per se* lead to a change in public policy?

Expenditures

The expenditures by all levels of government in Canada are now slightly more than 40 per cent of the gross national product (GNP). This does *not* mean, however, that 40 per cent of GNP is accounted for by government expenditure. Nearly one-half of these expenditures are transfer payments, which are not reflected in the National Accounts. The GNP is a measure of the total value of the newly produced goods and services in a nation in a year. Nevertheless, the thought that about one-fifth of all goods and services are bought by government (so-called "exhaustive expenditures") is awesome, as is the thought that transfers bulk so large in the incomes of individuals, non-profit organizations, and businesses. No one could doubt that expenditures are a much used policy instrument.

We shall leave to the summing up at the end of this chapter the question of whether expenditures are too large, in some sense. Lest the reader's expectations be unduly raised, it should be stated that the question is considered to be unanswerable.

As with taxation, there are an endless number of possible classifications of expenditures [see Bird (1979), p. 123]. The "best" classification depends upon the uses to which the data are to be put or, more precisely, the question(s) that is (are) to be addressed. Table 5-2, reproduced from Canadian Tax Foundation, *National Finances, 1978-79*, shows the relative orders of magnitude of expenditures, classified in a conventional manner. The totals, in absolute terms, were as follows: federal, $36.8 million; and provincial/local, $50.3 million.

Table 5-2

Consolidated Government Gross General Expenditure, 1975-76

	Consolidated expenditures		
	Federal	Provincial/ local	Total
		(Per cent)	
Social welfare	38.8	11.6	22.5
National defence	9.2	—	3.7
Health	.8	20.3	12.5
Debt charges	9.9	6.7	8.0
Transportation and communications	8.3	10.2	9.4
General government	6.5	6.0	6.2
Education	.9	24.2	14.8
Agriculture, trade, industry, and tourism	5.6	2.2	3.6
Protection of persons and property	2.3	5.6	4.3
Foreign affairs and international assistance	2.6	—	1.0
Research establishments	1.8	.1	.7
Natural resources	6.8	1.9	3.8
Transfers to own enterprises	1.8	1.3	1.5
Labour, employment, and immigration	1.3	.1	.6
Recreation and culture	1.2	3.4	2.5
Development of regions	.4	.5	.5
Housing	1.1	1.4	1.3
Environment	.8	3.9	2.7
Other	.8	.6	.4
Total	100.0	100.0	100.0

SOURCE Canadian Tax Foundation, *National Finances: 1978-79* (Toronto: Can. Tax Foundation, 1979), p. 31.

Administrative Costs

The administrative costs are such a small proportion of the total expenditures that, like taxes, it is difficult to imagine a decision to adopt a particular form of expenditure being influenced to any significant degree by administrative cost-minimization considerations. Equalization payments paid by the federal government to the "have not" provinces in 1975-76 amounted to about $2.6 billion. Leaving aside the protracted continuing federal-provincial negotiations on the subject, which themselves involve perhaps 100 officials on a semi-permanent basis, the cost of writing cheques to seven provinces each quarter is virtually zero. On the other hand, the Canada Council, which makes grants in support of educational, recreational, and cultural activities, disbursed about $63 million in 1977-78 and spent about $9 million for general administration. If the

federal government sought to minimize administration expenses, the Council theoretically could be abandoned and the funds could be allocated among the provinces on a *per capita* basis with the stipulation that the same purposes must be served. Similarly, the federal Department of Economic Expansion, with a budget in 1977-78 of $540 million for industrial development and infrastructure subsidies, spent about $43 million on administration. The latter costs could have been largely avoided by abolishing the DREE programs and substituting some (peculiar) kind of shared-cost program administered by the provinces.

In one sense, the potential "savings" just discussed could be completely illusory if the provinces had to establish additional administrative machinery to carry out the expenditure programs that the federal government was hypothetically abolishing. It is conceivable, however, that the provinces already have the machinery in place, for the most part, and duplication could be eliminated. This brings us to an important point.

There seems little doubt that a federal system of government is more costly than a unitary form. There are some economies of scale that are forgone, and there is inevitably some duplication. Nevertheless, although one hears from time to time critical comments that Canadians are "overgoverned" and abhor the attendant waste, these criticisms completely ignore the overwhelmingly important fact that the capacity of governments to meet the divergent preferences and needs of voters in different regions is greatly reduced under unitary governments. What would be gained if government administration costs were cut to zero, but the uniform output of government failed to satisfy large numbers of voters in some regions that could be better satisfied by other types of expenditures at the same total cost? The objective of a federal system is to permit provincial and local governments a degree of autonomy in those policy areas that have neither positive nor negative externalities beyond the jurisdiction while maintaining a common market in goods, services, capital, and labour. These benefits are thought by most federalists to outweigh the extra administrative costs. The greater the interregional disparities in preferences and conditions, the less important relatively are the extra administrative costs entailed by a federal system [Bird, 1979].

Putting aside the federal-provincial aspects of administrative costs, it might not be unreasonable to conjecture that the relative administrative costs of the principal forms of expenditure might roughly be ranked in ascending order as follows:

- demogrants (e.g. OAS, Family Allowances);
- income-tested transfer payments to individuals (e.g. GIS);
- compulsory pension programs (e.g. CPP);
- tax expenditures for individuals and businesses;
- subsidies to businesses, including subsidized loans;
- compulsory insurance programs (e.g. UIC);
- highly discretionary grants to business (e.g. the R & D grants of ITC, and the "new job creation" grants by DREE);
- highly conditional welfare payments to individuals and families (e.g. CAP); and
- provision of public services (e.g. defence, hospitals, schools, and roads).

If the minimization of administrative expenses were given great weight, one would suppose that income-tested transfer payments to individuals (e.g. guaranteed income, or negative income tax – NIT) would displace welfare payments and possibly the public provision of medical, hospital, and educational services. Similarly, discretionary grants to businesses would be replaced by tax expenditures. Other substitutions could no doubt be devised.

Compliance Costs

Except for the last item on the foregoing list (public provision of services where the compliance costs of beneficiaries are negligible), it does not seem unreasonable to speculate that as we move down the list from those expenditures that are relatively cheap to those that are relatively expensive to administer, compliance costs increase *pari passu*, roughly speaking. Filling in one form and supplying a copy of a birth certificate is all that is required for OAS payment entitlements. On the other hand, applicants for industrial grants usually have to spend much time, energy, and money in supplying the required information and in assembling a persuasive written argument. Obviously mothers' allowances, for example, are probably even more onerous relative to the amounts obtained: frequent interviews, inspections, forms, and so on. Hosts of professional and not so professional social service workers and administrators are involved in "helping" the putative beneficiaries.

Because, as we have just said, substitutes are available that are less costly from an administrative point of view and because high administration costs are associated, for the most part, with relatively high compliance costs, it seems most unlikely that the

minimization of these costs has had much bearing on the choice of forms of expenditure.

Relative Allocative Efficiency of Expenditure Forms

It is generally recognized that pure public goods – that is, essential public facilities and services – as well as facilities that have a high degree of "publicness" about them, such as urban roads and parks, must be provided by government. The demand by individuals for the security of their persons and their property can only be met by collective action, for example [see Head, 1974]. Without collective supply, resources would be allocated inefficiently, to put it mildly. Unanimity of view with respect to the *means* of supply does not, as previously emphasized, imply unanimity as to the quantity or quality supplied. Nor does it imply unanimity about the allocation of the costs. In the balance of this section attention is directed towards more disputatious aspects of expenditures. In particular, three rationales for expenditures will be addressed: the amelioration of market imperfections, the redistribution of income and wealth; and finally so-called "merit goods" that governments purport to supply at less than cost to induce greater consumption [see Gordon, 1977].

Market Imperfections

Technically speaking, tax concessions (i.e. tax expenditures) and subsidies are perfect substitutes, with one important qualification: a tax expenditure provision reduces the tax liability of a taxpayer and is tantamount to a cash transfer. Obviously, this means of subsidizing a particular activity to offset a market imperfection is completely ineffective for those without a tax liability. A potential new firm faced with a capital market bias that inhibits financing cannot be assisted by a reduction or postponement of corporate tax, for there is no income. In those instances where the principals are not wealthy, grants or guaranteed loans, or government share purchases, are necessary if anything is to be done. (We ignore here the regulation of financial institutions, which might help to offset the bias.) By the same token, because slavery is prohibited, human capital *per se* has no value as collateral. Individuals seeking conventional loans for educational purposes, for example, find it extremely difficult to borrow unless more affluent co-signers can be found. Bursaries, guaranteed loans, and, more questionably, subsidized educational facilities and services are warranted.

Although it is possible to devise, at least technically, taxes on activities that produce negative externalities, such as environmental pollution, this instrument is not capable of offsetting the underproduction of goods and services with positive externalities. Basic scientific research, the arts, cultural nationalism (a term of uncertain meaning), recreational facilities, public transport, primary education, to cite a few examples, are generally thought to bestow positive externalities and hence are unlikely to be pursued to an efficient extent without public financing. Private philanthropy suffers from the "free-rider" problem, which can be partly offset by tax concessions but usually with dubious income and wealth distributional consequences. In these and similar situations a plausible argument can be made for government expenditures as a means of reducing market imperfections. The "appropriate" amounts and the "appropriate" forms are, needless to say, less obvious.

There is another significant difference between tax expenditures and direct expenditures that must be acknowledged. Taxing statutes tend to be strictly construed by the courts. The onus is on the government to prove that it has a right under the statute to snatch money from a person's pocket. The ministry can exercise much less discretion with respect to a tax expenditure than it can with respect to a grant or non-statutory subsidy that is, to all intents and purposes, made at the discretion of the minister, with extremely vague constraints. This discretion can be abused, as we shall discuss later. Leaving aside the question of abuse, it can be argued, more or less plausibly, that under some circumstances discretionary expenditures are, or can be, more efficient than tax expenditures. An incentive is efficient only when it induces an *increase* in a desired activity relative to that which would otherwise take place. The greater the desired increase per dollar of subsidy, the more efficient the subsidy. Conceptually one can differentiate between increases in activity that take place only because of the subsidy and increases that would take place with or without the subsidy. Although tax expenditures can be restricted to incremental amounts – that is to say, only to expenditures in excess of those in some base period – they certainly cannot differentiate between those that *will* take place without the concessions and those that *will* be induced by the concession. The distinction is a matter of intent and hence almost impossible to determine objectively.

Without a truth drug, one cannot help but be enormously skeptical concerning the capacity of officials to ascertain the intent of the applicants for grants of one kind or another on the basis of nominal investigations. Nevertheless, in the case of both DREE and ITC grants, the applicant is required to swear under oath that the desired future activity would not

have taken place without the grant. The officials supposedly determine the plausibility and feasibility of the applications. If one could take the granting process at face value, it would indeed be more efficient than tax expenditures designed to achieve the same result. The most efficient tax expenditure can only be retrospectively based.

The Disincentive Effects of Transfer Payments

It is impossible in a short compass to do even a semblance of justice to this massive and complex subject. Virtually every government expenditure has redistributive effects, and undoubtedly many of them induce behavioural adjustments. Of necessity, what follows is essentially illustrative and impressionistic.

Equalization Payments

The federal government makes payments, financed out of general revenues, to each of the "have not" provinces that purport to compensate for revenue shortfalls, on a per capita basis, relative to the revenues they would have received had they applied national average tax rates to the national average tax base. These payments are financed from general revenues that, hardly surprisingly, are primarily collected (directly or indirectly), from persons resident in the "have" provinces. The rationale behind these massive transfers is to ensure that all Canadians can enjoy approximately the same level of government services without inordinate "fiscal effort" having to be exerted by the governments of the poorer provinces. There has long been heated debate among academic economists about the implications for the allocation of resources [Breton and Scott (1978), IV-53 for 7, 152]. Whatever the other virtues, there seems to be little doubt that this transfer program, by financing better public services in depressed areas through higher taxes on persons in high-growth areas, tends to *inhibit* the mobility of individuals from the former to the latter. Assuming, as seems eminently reasonable, that such individuals would be more productive in the high-growth areas (if for no other reason than they would find jobs), the program reduces the national output of goods and services but maintains, in the depressed regions, pockets of individuals who are heavily dependent on government support in one form or another. Although the residents of those regions generally lack economic power, they certainly do not lack political power.

Alternatives have been discussed. It has been proposed by the late W.A.C. Bennett of British Columbia, and T. Courchene [1980, p. 103] that these unconditional grants to the poorer provinces be abolished and that the funds be used to finance transfer payments to low-income *individuals*, wherever situated. This would not correct the perverse effects on mobility, of course; but it might be more efficient in that the recipients might obtain more satisfaction from their own increased consumption than they obtain from the goods, services, and transfers financed by the provinces from these grants. The politicians in the now-recipient provinces are not enthusiastic about this proposal, for obvious reasons.

Unemployment Insurance and the Canada Pension Plan

Both of these "contributing" plans have important redistributive effects and, what is of more concern here, allocative effects.

The UIC scheme is financed equally through employee and employer contributions. The federal government provides additional (often massive) financing from general revenues when unemployment rates are high [Canadian Tax Foundation (1979), p. 133]. Although dubbed "an insurance scheme," contribution rates are related to employee income (with a ceiling); they are not risk-related. Employees in some industries – particularly those of a seasonal nature, like construction, fishing, and forestry – draw a great deal more in benefits than they and their employers contribute. As a consequence, the scheme, in effect, finances a large wage subsidy in these industries. Because these industries are relatively competitive, this means that their output is sold at prices that do not cover full costs. Their output and the industries themselves are therefore larger – in the long run, at the expense of other industries – than they would otherwise be. This represents a misallocation of resources relative to what would result from a risk-related contribution system. Although it is conceivable that this consequence was not envisaged when the scheme came into being in the 1940s, attempts to remove this wage subsidy have been rebuffed most vigorously. With the exception of construction, the principal beneficiaries are frequently concentrated in one-industry communities that are now heavily dependent upon the scheme in the off-season. This, coupled with the fact that these communities are usually in depressed areas, compounds the problem. The adverse effects on labour mobility reinforce the same effects of the equalization payments program just cited. It should be noted that until recently the UIC benefits provided took no account of the total *annual* income of the claimant. It was possible, therefore, for persons earning, say $25,000 a year in the fishing season to draw substantial benefits in the off-season as well – a powerful vote buyer! This has been tightened to some extent

recently in response to the widespread hostility of taxpayers who were nonbeneficiaries.

Logic and the empirical evidence support the contention that when generous benefits are paid to the unemployed the vigour of their job search is reduced and the duration of the search prolonged. The unemployed can afford to be more "choosy" when their income while unemployed is about two-thirds of their earnings when employed (expenses are lower) and the benefits are available for many months. Both of these phenomena increase the unemployment rate (Rea estimates by about one percentage point [1977, p. 263; see also references cited therein]) and thereby reduce national output.

Technically the UIC scheme could be altered to reduce, if not eliminate, the disturbing effects just described. A guaranteed annual income scheme could conceivably be substituted. The problems of benefit timing, however, are almost insurmountable. Few of the unemployed could survive financially until year's end if the payments were annual. And to base the current year's supplement on the previous year's income would often result in overpayments that would be difficult to recover. The Guaranteed Annual Income Supplement (GAI) payments involve disincentive effects, too, because as incomes rise, the transfers decline as a result of an implicit "tax back" rate.

The Japanese apparently "solve" the unemployment problem by requiring employers to retain their employees whether or not there is work for them to perform. In other words, employers are implicitly taxed, and the "wages" are essentially transfer payments. The relationship between government and business in Japan is not, however, as it is in Canada. Many European countries import marginal workers from poor countries during prosperous times and deport them when a recession hits. This reflects a different attitude towards immigration than has traditionally prevailed in Canada.

Like the UIC scheme, the Canada Pension Plan has major redistribution and allocative effects. Given that the scheme is, in essence, a forced saving scheme, private saving is reduced. Although the substitution is not complete, the flow of funds to financial institutions is reduced. This is offset in part by the generous deductions for pension contributions accorded by the *Income Tax Act*. Of great significance is the fact that the CPP receipts (forced savings) are loaned to provincial governments at relatively low interest rates. This reduces the reliance of these governments on the capital market and may well have resulted in a more rapid increase in their expenditures than would otherwise have occurred. To the extent that the funds were "wasted" by governments relative to the productivity-increasing uses to which they might have been put by private sector borrowers, a misallocation of resources has occurred.

Welfare Payments and a Guaranteed Annual Income

The designers of income-related transfer payment schemes are faced with a dilemma. Three elements are involved in any such scheme: the amount paid to those with zero income; the break-even income level at which a person neither receives a transfer nor pays tax; and the rate at which transfers are reduced as income increases. Having selected any two elements, the third is, in effect, determined. Consequently, if the "tax back" rate – the rate at which transfers are reduced as income increases – is to be sufficiently low as not to deter work effort (e.g. a marginal tax rate of 50 per cent or less), either the amount paid to those with no income must be extremely low or the break-even income point must be extremely high. If the first is extremely low, the scheme will be rejected because of public pressure against "starvation" allowances. If the minimum income is high, the cost of the scheme is intolerably large. Individual persons and families with "average" incomes would be receiving transfers, and the taxes placed upon those with above-average incomes would result in even less acceptable disincentive effects. A high proportion of those at the upper end of the income scale are not only more productive but more capable of adjusting their work effort and consumption/saving behaviour. They are also, generally speaking, more mobile.

It should also be noted that the income-tested GAI supplement to Old Age Security (OAS) is a further deterrent to personal retirement savings. Under this scheme, the GAI is reduced dollar for dollar for aged individuals with other income. This is a 100 per cent tax on non-OAS income up to the GAI maximum. Why save for your old age if the income earned on your investment is to be deducted from your GAI entitlement?

Canada Assistance Plan

Welfare programs are often criticized because of the large number of agencies and the turgid processes and procedures involved. The resulting administration and compliance costs were discussed above. On reflection, however, a strong argument can be made that "the system" is extremely efficient, in perhaps the most meaningful sense. It denies benefits to the "working poor" and vigorously polices the margins of that large and vitally important group. Social pressures, rules, regulations, demeaning interviews, and other unpleasant techniques are all used to prevent, as far as possible, the escape of the working poor into the welfare system. The result is

that many entitled to benefits do not receive them. Although perhaps not consciously devised to do so, "the system" seeks to create massive barriers against not working for those who can. The reason is obvious. If the incentive were tipped the other way, most of the low-paying, low-status, repetitive, uncomfortable jobs would not be performed in a "free" society with even a modestly generous GAI program.

Merit Goods – The Case of Primary Education

Government expenditures on education in one form or another are frequently rationalized on one or all of these bases: education yields significant externalities by contributing to the creation of a more informed electorate; free or subsidized education increases the degree of equal opportunity for individuals of equal capacity; because of parental ignorance or financial incapacity, at least primary education [Head (1974), p. 214] must be compulsory and, if so, fees (taxes) should not be charged because of their regressive nature. The first basis has been commented upon earlier; the second can be looked upon as essentially an argument for income redistribution in favour of the poor generally, and of the poor parents of younger children particularly. In this subsection we shall emphasize the third rationale.

In principle, government expenditures in support of additional education for children of the poor (we ignore adult education for the sake of simplicity) can take three forms: make income-tested unconditional transfer payments to parents that would make it feasible for them to finance an adequate education for their children should they so choose; supply low-income families with vouchers that could be exchanged for educational services offered by competing private schools; supply compulsory public school education free.

To reject the income support approach implies the rejection of economic *efficiency* as a criterion. Surely, the purist would argue, the parents' satisfaction derived from a given income (including the transfer) would be maximized if they were free to make their own consumption/investment decisions. Such an argument presupposes that the parents' concern for their children is as great as their concern for themselves. It also presupposes that parents are fully informed about the future consequences of their decisions concerning the education of their children. Because no major government has adopted the income supplements as a substitute for public education, one can infer that one or both of the presumptions (or some other factor) has not been accepted. Either a voucher system or a compulsory free elementary education system reflects a collective decision to reject, where necessary, parental preferences in the interest of the child and/or society.

Elementary education is, in the terminology of public finance, "a merit good." These are goods that are deemed to be consistently undervalued by some individuals, in this case parents, either because of inordinately high discount rates that lead to inadequate savings and investments or because of ignorance that leads to underinvestment in education relative to other things. Perhaps, too, some parents are judged to be selfish in weighing the interests of their children against their own.

Turning now to the voucher system and the free compulsory elementary education alternatives, Milton Friedman [1980] and his followers have long advocated the adoption of a voucher approach rather than the public provision of elementary education. A voucher system would entail competition among profit-maximizing suppliers, which, in Friedman's view, would result in an improved quality of education and/or lower taxpayer costs. Certainly it would provide a much wider range of educational alternatives. The advocates of the public provision of public education argue that some parents are not capable of exercising such choice wisely, presumably because of ignorance or selfishness. It is thought that some would "buy" with the vouchers low-quality educational services offered by competing private suppliers. It is implicitly assumed that regulating minimum standards would either be too costly or ineffective. Conceivably some of the critics of the voucher system also oppose the elitism that might be fostered by such a private school system. Teachers and administrators now employed by the present public school system might, conceivably, have other more personal reasons for objecting to a voucher system if they perceived that it could threaten their job security or future income prospects.

This brief discussion of a particular merit good – primary education – has sought to bring to the reader's attention four points:

1 Some services and facilities are provided by governments for reasons other than to attempt to redistribute income or to correct market imperfections, although these two reasons may also be involved – and presumably they are – in the primary education case.

2 The second reason, or class of reasons, encompasses primarily a collective decision to override the preferences of individuals, presumably for their own good (paternalism/maternalism by the politically effective) or for the collective good, or some mixture of the two.

3 When governments prescribe a course of action for rich and poor alike and when compliance involves substantial costs, as in the case of elementary education, demand for public provision can be expected.

4 Public provision is only one of a number of alternative means by which services can be made available in greater quantity and of supposedly better quality than the competitive market would supply and to individuals who would otherwise not avail themselves of the services by choice or circumstance. Income transfers and vouchers have been briefly discussed, as have their respective merits or disadvantages. Subsidizing private suppliers is another method, as is government provision of the service from private suppliers on a tendered contractual basis. The principal objection to the latter method, and it applies also to the income and voucher methods, is the difficulty in controlling the quality of the services privately supplied. The more intangible the service (and education certainly has a substantial intangible element), the more difficult it is to develop workable, objective, specifications and to monitor adherence to them. On the other hand, does public provision, *ipso facto*, ensure a consistently high quality of service? Consider the Post Office, where quality is readily assessed and found wanting.

Although the argument has proceeded by way of examples, it is hoped that the point has been made that most government expenditures, like most taxes, induce resource misallocation (economic inefficiency). The expenditure programs that reduce or offset market imperfections are both rare and quantitatively trivial. This is not to denigrate virtually all government expenditures. Many of them have a redistributive effect (or at least purport to have). Such a purpose is just as legitimate as greater economic efficiency. What must be reiterated is that there is almost certainly a trade-off between greater efficiency and the redistribution of income that is often ignored. Some expenditure forms undoubtedly exact a higher price than others in terms of efficiency lost. The same is true of most tax forms. As will be discussed later, most regulations and other policy instruments have similar characteristics.

If those in authority seek to redistribute income and wealth, and if for some (implausible) reason political considerations were irrelevant, the advice of economists would be easily stated (although extremely difficult to implement): use the most efficient bundle of policy instruments to achieve the desired reallocation. This does *not* mean that expenditures as a class of instruments are superior to, let us suppose, regulations as a class of instruments. Some forms of expenditure – or, more precisely, the structure of a particular expenditure program – can have efficiency effects that are as perverse, as some regulations. The "efficiency of instrument" issue must be tackled on a case-by-case basis. To compound the complexity, particular policy instruments often have significant interactive effects. The consequence is that the optimal *mix* of particular instruments is the relevant consideration. That mix can be defined mathematically (e.g. logically): selecting it operationally is inordinately difficult, to the point of impossibility.

Illusion in Expenditures

Illusions can be created about direct expenditures, as they can about taxes and other policy instruments. And these illusions can help to generate electoral support that is just as real as support based on valid perceptions of costly benefits. Illusionary expenditures do not have to be financed by vote-losing real taxes or borrowing. As a general proposition, however, it is probably reasonable to say that expenditure-related illusions are less common or less important than those related to taxation or debt management. For one thing, it is much easier for most voters to understand a government expenditure, or its absence, than it is for them to understand the implications of an obscure tax provision. For another, the parliamentary system with its annual printed *Estimates* and *Public Accounts* and the Auditor General's *Annual Reports*, together with the debates and media coverage, draw attention to a few specific expenditures each year. As stated earlier, this is unlike tax provisions, which, once enacted, remain in effect until amended. These points notwithstanding, it remains true that it is in the self-interest of the ministry to seek to magnify the expenditures (or benefits) provided to marginal voters, to spend as little as possible for the benefits accorded infra-marginal voters, and to hide the benefits being provided to some marginal voters judged unworthy by other marginal voters.

Awareness

Without doubt the most politically unrewarding expenditures of the federal government are the enormous transfer payments to the provinces either on an unconditional (e.g. equalization payments) or conditional (e.g. 50-50 sharing of provincial welfare costs under the Canada Assistance Plan) basis. The vast majority of federal taxpayers are probably completely unaware that a large proportion of their federal taxes (49 per cent in 1975-76) went directly into provincial government coffers. Provincial governments seek all the political credit for their expenditures, which involves down-playing the federal contributions. Consequently, voters/taxpayers are prone to ask why they are paying so much to the

federal government for so little. By ending, in 1977, shared-cost programs for medicare and postsecondary education and by providing the provinces with compensating tax points (e.g. offsetting reductions in federal tax rates so that the provinces had "room" to increase their taxes at little political cost), federal politicians sought to escape from the seemingly endless and certainly uncontrollable expenditures under those programs. Simultaneously, they also sought to make federal taxpayers aware that the federal tax, for federal purposes, was less than it had previously appeared.[5]

The infrastructure grants made by DREE – primarily to Quebec and the Atlantic Provinces – to finance highways, electric power, and the like are, in many respects, discretionary enrichments of the equalization payments they receive by statute. Unlike the latter, however, they can be directed to areas where marginal voters can be attracted. The federal government insists, as part of its agreement with a province, that large signs be posted identifying the federal participation. "Doing good works by stealth" is rarely a political virtue, where expenditures on marginal voters are concerned.

Probably the greatest voter awareness with respect to expenditures attaches to the OAS, GIS, and Family Allowance cheques mailed to millions of voters each month, oft-times with a propaganda-type message. [For the numbers of beneficiaries of particular transfers, see Canadian Tax Foundation (1980), pp. 119, 120, and 132.] The refundable income-tested credit for children, introduced a few months before the election of May 1979, is in the same category. One can well understand Ottawa's firm rejection of Quebec's demand that it discontinue these payments and provide the province with an equal amount of cash, to be dispensed by means of a Quebec scheme. The federal government, not surprisingly, is reluctant to raise tax revenues and allow a province to spend them.

The high visibility of these payments is of great advantage to a ministry when it can announce increases or extensions. By the same token, negative changes, even if they should greatly improve their effectiveness in reaching target groups, are extremely unattractive politically. For example, by introducing income testing, using the personal income tax, the same OAS expenditure could provide much larger payments to the elderly who are poor at the expense of those elderly who are comparatively well-to-do. Until now, this change has been judged as politically suicidal. Ministers are, in a real sense, prisoners of a voter illusion. The introduction of the refundable income-tested tax credit for children was a modest move towards income-tested benefits. The *political* rationality of these highly visible and economically inefficient payments is now in doubt. When introduced or when enriched they clearly had great appeal to many voters; but what proportion of those receiving the benefits *today* are marginal voters? And perhaps equally important, is it not true that after a few years even the marginal voters take such payments for granted? Do they not ask: "What have you done for me *recently*?" Politically, the expenditure commitment is virtually cast in concrete; for the marginal voter, however, the political party of choice in a coming election is not.

The greater visibility of expenditures relative to, say, tax concessions or regulations does not appeal to special interest groups. They would prefer benefits that leave no obvious dollar tracks in the *Estimates* or *Public Accounts* and that are available each year but do not regularly come under the scrutiny of Parliament and the public. The benefits of tax concessions or regulations are undoubtedly more certain.

It is difficult, however, to provide a benefit to a *particular* town or country, or firm, by way of a new tax concession or a new regulation (leaving aside licensing and the non-enforcement or regulations with respect to particular firms). The traditional method was by way of public works: a new post office, a new government building, a new highway, a wharf, a breakwater, and so on. Government contracts could sometimes be placed with local firms, generating local jobs (and profits). These methods of attracting marginal voters and campaign support still exist and are widely practised. Such expenditures are highly visible to those directly affected.

Although the information can be found by a diligent search through the *Public Accounts* (published significantly later), few individuals have sufficient interest to bother. These contracts, however, may create problems when criticized in the Auditor General's *Report*. And how many post offices or federal buildings can there be in a small town?

Expenditures in support of "economic development" in its myriad of forms are much more acceptable than the traditional "pork barrel" to a more sophisticated electorate and often permit the ministry to bestow, with pinpoint accuracy, the same kinds of benefits. The enabling legislation and the wording of the legislated appropriations offer a broad range of ministerial discretion, on the one hand; and funds are appropriated for the vaguest of purposes, on the other.[6] Little or no attempt is ever made to assess the extent to which additional economic development was, in fact, fostered [see Economic Council, 1977]. This policy instrument must be accorded top marks for *political* effectiveness.

On the face of it, the very existence of the equalization payments scheme seems contrary to our basic thesis. Here is a scheme whereby the federal government bears the hostility associated with revenue raising and then turns the funds over to the poorer provinces on an unconditional basis. The provincial governments then enjoy the political pay-off when making the expenditures. Was it politically rational for federal politicians to agree to such a scheme?

The present equalization scheme evolved from the first tax rental agreement negotiated in 1940 and signed in 1941. Under this agreement the provinces were given an option. In exchange for their personal and corporate tax bases the federal government offered to guarantee the provinces their 1940 revenues from these taxes for five years or the federal government would cover the debt charges of the province, whichever was larger. Two provinces, Saskatchewan and Nova Scotia, qualified for the debt provision. This *formula-type* (generalized) subsidy to poor provinces was the beginning of equalization, although it was implicit rather than explicit.

According to R. B. Bryce, one of the participants in the negotiations and a historian of the period [in a telephone conversation on July 6, 1981], the federal authorities believed that without this subsidy the two provinces would have been unable to meet their debt obligations (i.e. would have been technically bankrupt). These defaults would have created uncertainty in the market for Canada bonds at the very time that massive wartime borrowing was necessary. The "national adjustment grants" (explicit equalizations) proposed by the Rowell-Sirois Commission a few years earlier were not a factor, according to Bryce.

Two events of significance for this story occurred (in reverse order) thereafter: 1/ the federal tax rental was enriched to persuade some of the provinces (e.g. British Columbia) to stay in for tax-base harmonization reasons; and 2/ Quebec declined to renew the agreement on fiscal autonomy grounds and decided to collect its own taxes. As a consequence of the enrichment of the rental agreement, over the years Quebec revenues significantly fell behind what they would have been had the tax rental agreement been signed. According to Bryce, the equalization scheme was formally separated from the tax rental system in 1975 by Louis St. Laurent in order to make up Quebec's revenue deficiency while still allowing it to opt out of the agreement. Needless to say, it had to be provided on a generalization basis and given some plausible and laudable objectives.

Hidden Increases and Decreases

If it were easy for government to hide expenditure decreases, the large and persistent deficit of the federal government would have been eliminated several years ago. What might be added, however, is that the indexation of social security payments certainly has increased, and will continue to increase, expenditures dramatically until inflation abates. But because the increase is automatic it is disastrous from a political point of view. When benefits rise automatically the politician can claim no virtue. Why politicians took this seemingly perverse step, from the point of view of their own interest, is another mystery.

Indexing the pensions of federal public servants and MPs simultaneously, although undoubtedly controversial from time to time, was a stroke of self-interested bureaucratic genius. The MPs of all parties can hardly be enthusiastic about cutting off attractive benefits for themselves; yet they cannot take away the benefit from public servants without raising questions about their own positions. Meanwhile, promises of tightening are occasionally made and indexing marches on largely unnoticed, except by its direct beneficiaries.

Perhaps the most effective method of hiding expenditure decreases is to increase appropriations for infra-marginal purposes by rates that are less than the inflation rate. This makes it possible for ministers to assert that "We have not cut back our expenditures on (such and such). We are now, as we always have been, fully committed to maintaining the highest standards of (you name it)." Inflation is not all bad when it comes to altering the *composition* of government expenditures at the lowest political cost.

Similar techniques were discussed in the tax field for hiding decreases from the eyes of most voters. The same results can be achieved with many regulations. The number of licences can be gradually increased or decreased, as can quotas and floor prices, as well as the degree of enforcement. Even government-owned corporations can be made to expand or contract with little public awareness by, for example, "soft" loans, loan guarantees, or debt forgiveness. By one or another, or a mix, of these kinds of strategies, one group of marginal voters can be attracted without repelling another. Benefits can be withdrawn from infra-marginal voters so surreptitiously that they are not aroused to the point where they become marginal voters and vote for the other party.

Expression of Concern

Large dollar amounts appropriated annually for worthy purposes can be used by ministers as proof

positive of their concern with particular problems. They make for good press releases and can be given a prominent place in speeches to groups of those especially concerned. That some of the funds appropriated are not, in the event, spent (i.e. allowed to lapse) is seldom observed. If large amounts show a large concern, then increasing amounts reflect increasing concern. And what more could concerned marginal voters ask? Even more attractive to the politician are, of course, the symbolic acts discussed earlier. Because they are financially costless, such gestures, as by alchemy, convert the lead of an uncommitted voter into the gold of a favourable ballot.

Enacting, but not enforcing, awesome environmental, health and safety standards is the regulatory equivalent. Establishing commissions of inquiry is an inexpensive equivalent. Tax cuts are more dangerous politically: the beneficiaries quickly become ingrates, and the political cost of reversing such cuts is extremely high. A withdrawal of a show of concern is worse than not showing concern in the first instance. Perhaps this partially explains the earlier bias towards expenditure increases in lieu of tax cuts.

Evaluation: An End to Some Expenditure Illusions?

In the preceding section it was noted that the recent publication of tax expenditure estimates may reduce some tax illusions, particularly if the effectiveness of some of them were objectively assessed and the result made public and transmitted to most voters by the mass media. Nominally at least, the demand for evaluation and disclosure with respect to expenditures *per se* has proceeded much further than for tax expenditures. Parenthetically it should be said that a Program Planning and Budgeting System PPBS, first adopted by the U.S. Department of Defence in the 1950s [see U.S. Congress, 1969], was formally adopted by the federal government in the 1960s. That system, had it been fully implemented, would have required continuing effectiveness evaluation of all programs. To cut short a long, sad story, the PPBS was formally revoked by the Nixon Administration and has withered on the vine in Canada.

The recently retired Auditor General, James Macdonell, was able in the early 1970s to persuade the federal Liberal ministry that the terms of reference of his office should include "value for money" auditing [for a summary of the situation, see Hartle, 1979*b*]. With this widened mandate and a virtually unlimited budget, he commissioned a large number of appraisals by management consultants (so-called SPICE teams) of the program evaluation *procedures* and *processes* in place in government departments. The result, to no one's surprise, was the discovery that little was being done. He called for massive improvements in his *Annual Report* of 1975-76. Simultaneously, roughly speaking, he successfully pressured the Government of the day into creating the Office of the Comptroller General. In response to his assertion that government expenditures were virtually out of control, the Government established a Royal Commission on Financial Management and Accountability (the Lambert Commission).

The Comptroller General, for his part, undertook, among other things, surveys of the evaluation procedures and processes already in place in about twenty departments. That number has since been increased. With this information in hand, he has negotiated a specific evaluation plan with each department. His announced intention is to publish these plans and the results of the evaluations when they become available, presumably according to plan [see Economic Council (1979), p. 69].

The Royal Commission issued its final *Report* (The Lambert Report) in the spring of 1979 [see Hartle (1979*b*), p. 366]. It recommended that every program be evaluated at regular intervals and that the results be made public. To add versimilitude to this newly discovered old PPB idea, Lambert recommended that Parliament hold deputy ministers accountable for evaluation of the programs for which they were responsible. The Conservatives accepted the *Report* before the May election that year and announced thereafter that they would adopt it. What the Trudeau regime will do remains to be seen. An Associate Secretary to the Cabinet is co-ordinating the Government's response.

Should even a fraction of these proposals be adopted and implemented, many of the most important political strategies cited above would have to be abandoned or substantially modified. For this to happen, however, several conditions would have to be met:

1 Objectives analyses would have to be carried out for all programs of significant size where this was technically feasible. Clearly the government ministry could not be allowed to select only programs expected to prove highly effective.

2 All basic data, methods, and results would have to be placed in the public domain without alteration.

3 The media would have to communicate the results to the general public.

4 Some groups would have to find it in their interest to press for change.

The "Optimal" Size of the Government Sector

The reader was warned earlier that although this subject would be touched upon at the end of this chapter an answer should not be expected; in our view, the question is inherently unanswerable. Several arguments can be advanced in support of this position:

1 However one defines the public sector, it is possible to alter the form of government involvement without changing its substance. What "real" difference is there, for example, between a stringently regulated, compulsory, private health insurance scheme, with government financing the premiums of those with low incomes, and a "public" health insurance scheme? On such differences, however, the measured *size* of the public sector depends.

2 Some economists, such as Colin Clark [1945, p. 371], have argued that when government expenditure exceeds some magic percentage of GNP (25 per cent in Clark's case), economic collapse is imminent. In terms of total expenditures that mark was passed in Canada decades ago. In terms of real goods and services, Canada is now close to that magic percentage. Whether the country is on the verge of collapse is a point for others to debate. Few would agree, however, that the sheer *size* of the government sector is any more than a significant factor, much less the sole factor, in any apocalyptic scenario. The point is, of course, that these prognostications ignore the *composition* of both taxes and expenditures, much less the impact of regulations and a vast array of other policy instruments. In a complex world, to claim that progress versus poverty is contingent on a single and arbitrary ratio surely is impossibly simplistic.

3 There have been a succession of economists for over a century who have argued that the size of the public sector was either too small or too large because of voter illusions concerning taxes and expenditures. None seem to have given a thought to government intervention by other means. An extremely insightful analysis by West and Winer [1980, pp. 607-22, including the references cited in the balance of this paragraph] clarifies the assumptions upon which these conflicting verdicts were based. As they discuss in their analysis J. S. Mill (1841) and more particularly J. R. McCulloch (1851), emphasized that because the public underestimated the benefits of government expenditures, it was necessary to create fiscal illusions "that would lead taxpayers to understand their tax costs in order to achieve the optimal size for the public sector." Buchanan and Wagner (1977) make the argument, derived in part from Pavioni (1904), that the opposite was the case. Taxpayers, they conjectured, underestimated tax costs, with the result that the public sector was too large. Downs (1960) took the earlier Mill-McCulloch position.

The virtue of the West-Winer paper is that they show that all of the foregoing emphasized the fiscal tax illusion or the benefit/expenditure illusion and ignored, generally speaking, the interrelationship between the two. Assuming that creating or dispelling illusions requires resources, they argue, in essence, that the "answer" to the optimal "tax expenditure level" question is indeterminate on an *a priori* basis. Although one might quarrel with some parts of their analysis – they fully acknowledge many limitations – its basic thrust seems sound.

In their work, West-Winer adopt the assumption that competing political parties seek to maximize the utility of the median voter, presumably in pursuit of electoral success. In our view, the utility of the marginal voters in marginal ridings is at issue – not the median voter. It would be of more than passing interest to know whether these marginal voters are, in fact, primarily concerned about the global issues of too much or too little government or about more specific (narrow) issues more closely related to their own short-run self-interest. One might speculate that politicians are not off the mark by proceeding on the assumption that bread-and-butter issues usually drive out the generalities when the votes are cast.

In the late nineteenth century, the Swedish economist Wicksell argued that governments should be *required* to present simultaneously to the electorate, when proposing each increase in expenditure, a commitment as to the means by which it would be financed [Wicksell, 1958]. With such a rule many of the strategies discussed in this chapter would be impossible. Lindahl, a student of Wicksell, argued that a unanimity rule rather than a majority or plurality rule should be imposed in order to prevent coercive political decisions [Lindahl, 1958]. Would the public sector be of optimal size if either, or both, of these rules were adopted and enforced? Or is the question of optimal size meaningless? Is the issue not hopelessly insensitive, for example, to the quantity and quality of government regulation? Surely regulation has something to do with government size, in an impact sense.

6 Public Enterprise

In this chapter we analyse public ownership as an instrument of intervention, examining the characteristics of public ownership that are likely to be influential in determining its substitutability for alternative policy instruments. In particular, we focus on the question of why a government might resort to public ownership instead of some other instrument (e.g. taxation, expenditure policy, or regulation) to accomplish a particular interventionist objective.

The puzzle of public enterprise, in terms of analysing the calculus of instrument choice, is the patchwork pattern of its manifestations and substitutes to be observed across Canada. For example, in the electric utility field, over the last two decades most electric utilities have been taken over by provincial governments; in Newfoundland, Prince Edward Island, and Alberta, however, they are either in whole or in part still privately owned. On the other hand, in provinces where the electric utilities are government-owned, natural gas distribution systems are typically privately owned but publicly regulated. In the case of the telephone industry, in Newfoundland, Nova Scotia, Prince Edward Island, New Brunswick, Quebec, Ontario, and British Columbia, we observe privately owned telephone systems, subject to government regulation; in Manitoba, Alberta, and Saskatchewan, the telephone systems are publicly owned. In Manitoba and Alberta, they remain subject to regulation by public utility boards; in Saskatchewan, the government-owned telephone system is subject to Cabinet regulation. In the airline industry, we observe a major national carrier, Air Canada (a publicly owned enterprise), in competition with another national carrier, CP Air (a privately owned enterprise), both being subject to extensive regulation by the Canadian Transport Commission; in regional markets, both airlines compete with various regional carriers, some of which, as in the case of Pacific Western Airlines, are owned by provincial governments. In the case of railways, we observe the co-existence of Canadian National Railways and Canadian Pacific Railways, the first of which is publicly owned. In the oil industry, we note the co-existence of a major private sector along with a publicly owned oil company (Petro-Canada). In the broadcasting field, we note the co-existence of a number of private networks with the Canadian Broadcasting Corporation, a publicly owned enterprise, all subject to various forms of regulation by the Canadian Radio-Television and Telecommunications Commission. In the insurance industry, we note in some provinces (especially a number of the western provinces) the existence of publicly owned automobile insurance corporations, while in other provinces these activities are carried on by privately owned enterprises subject to government regulation. In the case of postal services, we note the Post Office, run now as an executive department of government, competing with various privately owned parcel and courier services; its planned transformation into a Crown corporation occurs at a time when the U.S. government is planning to convert its Post Office from a corporation to an executive department of government. We note also, in capital markets, the existence of Crown corporations (e.g. the Canadian and Ontario Development Corporations), providing loan or equity capital to private sector firms in co-existence with private sector financial institutions; yet we also observe, in similar contexts, lending functions being performed directly by departments of government (e.g. the Department of Regional Economic Expansion).

In the face of such a mass of contradictions, it is tempting to resort simply to stochastic factors and ideology as explanations for the divergent patterns of selecting public enterprise as the instrument of intervention. In a Canadian context, however, ideology alone is not a robust explanator of the emergence of public enterprise, at least if party policies are treated as being, in some respects, ideological. As Vining and Botterell have shown [1979, pp. 22ff], in the case of the provincial Crown corporations, all political parties at the provincial level have resorted to public ownership as an instrument of intervention. While some recent work [Chandler, 1980] suggests that there may be some systematic differences between parties of the left and right with regard to the frequency of resort to public ownership

in some sectors it remains clear that ideology does not offer anything approaching a complete explanation. At the federal level, Canada has never had a social-democratic government; nevertheless, a very large number of government-related corporations have been created over the years by both Liberal and Tory governments. In Alberta and Ontario, the two provinces with arguably the strongest ideological commitment to free enterprise, we observe that, in the first case, the provincial government has purchased Canada's third largest airline (Pacific Western) and, in the second case, the provincial government owns Canada's largest Crown corporation (Ontario Hydro). On the other hand, to resort to historical accidents as explanations for the emergence of public enterprise is largely to acknowledge that the factors that bear on instrument choice are incapable of specification – an acknowledgment we do not accept.

The traditional reasons offered for the establishment and operation of public enterprises reflect a rich mixture of political, economic, cultural, historical, and ideological factors [see, for example, Shepherd, 1976; Pryor (1976), p. 9; U.S. Senate, vol. 6, pp. 102-24; and Sexty, 1978]. The striking common feature of all traditional summaries of the rationales for the choice of public ownership as the instrument of intervention is their lack of explanatory power. That is, for each rationale offered it is true that the rationale sometimes leads to public ownership, but it virtually never leads exclusively to public ownership as the instrument of response. For example, while it is widely accepted that public ownership is one way to regulate natural monopoly, it is just as clearly accepted that it is not the only way. It is possible to have a private firm regulated by a public regulatory board (indeed it is commonly observed) that is charged with regulating the private enterprise's behaviour so as to overcome the potential economic inefficiencies induced in situations of natural monopoly. Thus, in Canada and elsewhere, both publicly owned firms and regulated private firms are seen to engage in similar activities in numerous functional areas. As a result, it is not sufficient to invoke the banner of a field of activity requiring government intervention, such as natural monopoly, as a satisfactory explanation for the existence of public ownership, since such an approach fails to capture the diversity of alternative modes of government intervention. Rather, since the objectives of the intervention can normally be achieved in more than one way, one must go further to identify those characteristics of public ownership that will be influential in a particular context in determining the policy maker's choice of instrument.

Public Enterprise: Definition and Characteristics

In evaluating the appropriate role of public enterprise as one of the instruments of government, it is important that the evaluation be directed at a clearly focused phenomenon. The precise meaning of the term "public enterprise," however, resists specification. At its broadest, the generic term "public enterprise" might encompass all functions of government, including those carried on by both governmental departments and quasi-independent agencies and Crown corporations, as well as those accomplished by public support of an involvement in the private sector. Similarly, the term "Crown corporation" resists precise definition, both in legal and functional terms. Legal considerations such as form of organization, degree of ownership, powers of appointment of directors, and functional factors directed at the nature of the enterprise's activities and outputs are all relevant to the definitional problem.[1] For purposes of this essay we confine the scope of public enterprise to situations in which the government is engaged in the provision of goods or services to the public on a commercial or quasi-commercial basis. Similarly, the term "Crown corporation" is taken to refer to corporations in which the government has a *de facto* controlling interest and that provide goods or services to the public on a commercial or quasi-commercial basis.[2]

In the remainder of this section we attempt to identify the major legal and institutional characteristics of public enterprise and Crown corporations that will be influential in determining instrument choice. In doing so, we employ as our reference point the position applicable to federal Crown corporations.

Legal Characteristics

While a detailed knowledge of the legal characteristics of Crown corporations is not required for the purpose of this chapter, the essential aspects are relevant in that they may well be influential factors affecting instrument choice. We summarize below the characteristics as they relate to the creation, taxation, regulation of labour relations, accountability, and financing of Crown corporations.

At the federal level, all Crown corporations are created by one of three methods: by a special constituent Act of Parliament; by letters patent, typically pursuant to the *Canada Companies Act* [1970]; or by articles of incorporation under the current *Canada Business Corporations Act* [1974-75-76]. Under the current *Canada Business Corporations Act*, the government, through a Minister, can

apparently incorporate any company without reference to the Governor in Council or Parliament. Similarly, an existing Crown corporation may create a subsidiary under the *Canada Business Corporations Act* without prior government or parliamentary approval [Kirsch, 1979].

With respect to taxation, section 149(1)(d) of the federal *Income Tax Act* [1970-71-72] expressly exempts from tax:

> a corporation, commission or association not less than 90 per cent of the shares of capital of which was owned by Her Majesty in right of Canada ... or a wholly owned subsidiary to such a corporation, commission or association . . . .

Department practice apparently extends this exemption to wholly owned subsidiaries of Crown corporations. Section 27 of the *Income Tax Act*, however, negates section 149(1)(d) immunity for corporations listed in Schedule D to the federal *Financial Administration Act* and expressly declares them to be subject to income tax. Moreover, the section provides that such corporations shall be deemed not to be private corporations and thus not to be entitled to any of the special benefits accruing to private corporations such as the small business tax rate provided in the Act. It should be noted, however, that according to departmental practice, a wholly owned subsidiary of a Schedule D corporation will be entitled to the section 149(1)(d) immunity, as it is not itself listed in Schedule D. It should also be noted that these provisions apply to both federally imposed income tax and provincial corporate tax for the eight "agreeing provinces" (i.e. all but Ontario and Quebec) who collect their taxes through Ottawa.

At the federal level, employer-employee relations in Crown agencies are subject to the provisions of either the *Public Service Employment Act* [1970] or the *Canada Labour Code* [1970]. Broadly speaking, the *Public Service Employment Act* applies to departmental employees, as well as employees of designated government agencies. Crown corporations, in the sense in which the term has been used in this chapter, with very few exceptions, fall under the *Canada Labour Code*. There are several important differences in the two regimes. First, some matters that may be subject to collective bargaining under the *Canada Labour Code* are not subject to collective bargaining under the *Public Service Employment Act* and the *Public Service Staff Relations Act* [1970]; these include the setting of classification standards and of certain terms and conditions of employment. Second, under the public sector legislation, certain designated employees are prohibited from striking; this includes those employees whose duties are such that their performance is, or will be, necessary in the interests of the safety or security of the public.

At the federal level, only those Crown corporations scheduled in the *Financial Administration Act* are subject to a generalized scheme of financial accountability to the government and to Parliament. For Crown corporations not scheduled under the *Financial Administration Act*, financial accountability is either defined on an *ad hoc*, statute-by-statute basis, in the case of corporations set up under constituent Acts, or follows from the shareholder/corporation relationship defined in the *Canada Business Corporations Act*, in the case of Crown corporations incorporated under, or governed by, the latter Act.

Beyond the realm of financial accountability, in the case of most Crown corporations, the federal government has the power to approve bylaws and to appoint and remove directors, board chairmen, and chief executive officers, either pursuant to the powers to that effect in the constituent Act of a corporation or under the provisions of the *Canada Business Corporations Act*, where these apply. Sometimes, in addition, constituent Acts confer on the government the power to issue, through a Minister, policy directives to a Crown corporation. In the case of companies incorporated under the *Canada Business Corporations Act* or predecessor Acts, the designated Minister, as sole shareholder, would appear to have an equivalent power to issue policy directives in the form of unanimous shareholder agreements.

With respect to financing, at the federal level Crown corporations seeking access to government funds face, first, the budget approval requirements pursuant to the *Financial Administration Act*. With respect to grants or loans from the government, no payments may be made out of the Consolidated Revenue Fund without the authority of Parliament [Sec. 19 of the FAA]. This authority may be contained in a variety of sources, such as a special or general statute, or an appropriation in votes on estimates. With respect to guarantees of private sector borrowings by Crown corporations, a government guarantee can only commit the Consolidated Revenue Fund if it has been authorized by Parliament [Sec. 22]. By virtue of his role as manager of the Consolidated Revenue Fund, all guarantees both in law and in practice are given only by the Minister of Finance [Sec. 9].

Institutional Characteristics

In Hodgetts' striking phrase [1973, Chap. 7], Crown corporations are "structural heretics." In some ways, they resemble private sector enterprises maximizing profits subject to the constraints of applicable regulation or direction. In other ways, they

resemble bureaucracies executing public policies designed to promote non-market objectives. In coming to some view as to why politicians choose Crown corporations as a policy instrument in particular settings, it is important to attempt to identify the institutional characteristics that mark off Crown corporations, on the one hand, from private sector enterprises that are subject to government direction and influence through a wide range of policies, such as direct regulation, tax policy, subsidy policy, and procurement policy and, on the other hand, from bureaucracies, where government takes over and directly performs given economic functions. This task poses two major boundary problems: that of differentiating the characteristics of public ownership from private sector regulation; and, within the public ownership mode, that of differentiating departmental bureaucracies from Crown corporations. Viewing instrument choice from the perspective of the calculus that faces political decision makers, a number of characteristics would seem influential in determining the location of these two boundaries.

Public Ownership versus Private Sector Regulation

A number of institutional factors might suggest a policy preference, on occasion, for public ownership over private sector regulation (compendiously defined). Many of them derive from the notion of monitoring and information costs, first developed in the economic literature on the theory of the firm. We therefore begin with a discussion of this concept.

Monitoring and information costs – The economic literature on the theory of the firm [especially Coase, 1937; Alchian and Demsetz, 1972; and McManus, 1975] has sought to answer the question of why we observe firms internalizing the process of co-ordinating inputs rather than relying on the price system through independent contracting between entrepreneurs and input owners. Coase suggests that the main reason why it is profitable to establish a firm is that there is a cost to using the price mechanism; the most obvious cost of organizing production through the price mechanism is that of discovering what the relevant prices are. He also argues that the cost of negotiating and concluding a separate contract for each exchange transaction that takes place in the market must be taken into account. On the other hand, when a firm internalizes factor co-ordination, the character of the contract into which the owner of a factor enters with the firm is such that for a certain remuneration the factor owner agrees to obey the direction of the owner of the firm (or his agents) within certain limits. Within these limits the owner directs the other factors of production. When the costs associated with this process of direction are less than the costs associated with ascertaining relevant factor prices in the market and the transaction costs associated with negotiating independent contracts with these factors, it will pay a firm to internalize the co-ordination of its factors.

McManus emphasizes the enforcement costs associated with using the price mechanism as a constraint on behaviour: resources must be expanded in measuring the activity for which one is paying. In many contexts, pecuniary constraints on behaviour are not perfectly enforced because some changes in the activity of an individual will not be detected to the mutual satisfaction of buyer and seller. Where the buyer cannot perfectly specify, or enforce, the desired outputs from independent contracting, pecuniary incentives exist for the seller to chisel, shirk, or cut corners to the point where it pays the buyer to specify the contractual constraints more clearly and enforce them more strictly, or alternatively to choose a different and less costly form of economic organization for co-ordinating the factors. In choosing a firm that either owns or employs many of the relevant factors, an entrepreneur may be able to reduce his monitoring costs by acquiring (at a price) the right to engage in continuous direction in the allocation of productive activities within the firm.

Alchian and Demsetz suggest that in the classical private sector firm, the entrepreneur becomes a specialized monitor in directing the allocation of resources; moreover, he has strong incentives to perform his role efficiently by virtue of his position as residual claimant to the income of the firm after payment of the factors.

These explanations for the emergence of firms in our economy carry a clear analogue with respect to the boundary between public ownership and private sector regulation. A government contemplating regulating, or otherwise influencing, the behaviour of private sector enterprises faces many of the same kinds of costs faced by an entrepreneur engaging in independent contracting for factors. For example, to the extent that a regulatory fiat imposes costs on a private sector firm, it obviously faces incentives to undertake less than complete compliance with the fiat. Similarly, where the government is contemplating provision of a subsidy to a private sector firm, it faces the costs associated with obtaining and validating information from the firm as to its real subsidy requirements and with specifying, and enforcing, the conditions governing use of the subsidy and also, perhaps, the conditions determining qualifications for further subsidies.

To take a specific illustration, suppose a government should decide that in the interest of maintaining

employment in a region of high unemployment it is necessary to save a "failing" private sector enterprise. One option open to the government is to provide continuing subsidies. In order to determine appropriate subsidies, the government needs a great deal of information about the firm's costs, about conditions prevailing in the firm's output markets, about the potential for the firm substituting, over the long run, more efficient technology, about the likely effects of continuing subsidies on the incentives of the owners of the firm to improve the performance of the firm. In addition, if the purpose of the subsidies is to maintain jobs in the firm, presumably some conditions would need to be specified as to the type and level of employment that the firm would need to maintain in the region over time in order to qualify for the subsidies. These conditions may be difficult to specify and difficult to enforce. Because of the firm's superior access to much of this information, the government faces the risk of strategic behaviour on the part of the firm in exaggerating the size of the subsidy required and in exploiting the threat to terminate activities in the region, thus precipitating the politically costly elimination of jobs and other spill-over activities in the area. The various costs faced by government in administering a subsidy policy in this context, all of which in a general sense can be subsumed under the rubric of monitoring costs, are likely to be substantial and to create the same incentives for government to internalize factor co-ordination as for those facing entrepreneurs in the private sector in choosing between factor co-ordination through the price system or through the firm.

While we have chosen, in the interest of clarity of exposition, to isolate other characteristics of public ownership that might induce a government to favour this policy instrument over private sector regulation, they are, in several cases, variants of the monitoring cost concept [see Borcherding, forthcoming].

Policy co-ordination – In situations involving multiple public programs or objectives for intervention, the Crown corporation may be a relatively more effective instrument than a regulated private firm for enhancing policy co-ordination. It may be the case that in situations where the degree of public support for the private enterprise is not only substantial but takes the form of a variety of different programs, the cost of co-ordinating these activities can be reduced by internalizing them to the public sector through public ownership. For example, Tupper suggests that the creation of the Cape Breton Development Corporation can be traced in part to the complexities caused by the array of support programs that were previously being directed at the Cape Breton area in an attempt to moderate the recurring economic dislocation [see Tupper (1977), pp. 29-60]. Similarly, where there are multiple public objectives being sought through a particular enterprise, it may be that the cost of co-ordinating and reconciling these different objectives can be reduced by internalizing them through the management of, and accountability mechanisms applicable to, Crown corporations. This effect will be enhanced in situations where there are competing public policies being advanced; a trade-off among the policies, which may be difficult to achieve in explicit terms in an external forum, can be internalized through public ownership. For example, in the case of Telesat, it was necessary to trade off the competing considerations of Canadian content and commercial and technical viability – a task that would have been extremely difficult if done externally [see Trebilcock and Prichard (forthcoming), Sec. 4].

Industry structure – The structure and nature of the relevant industry will affect the relative desirability of public versus private ownership. In particular, the absence, or presence, of a competitive market structure in the relevant part of the private sector will be influential, as it will affect the monitoring costs identified above. Where there are numerous private firms available to perform a given function and there is competition among them to undertake this function, the industry structure itself will generate superior information for the government, thus reducing the costs of specifying and monitoring desired outputs. That is, the competition among the private firms will serve as a form of monitoring and information production, making reliance on the private sector relatively more attractive. In those cases where there is only a single firm or a small number of firms available, however, or where the existing firms are able through anti-competitive practices to behave as a single firm, the monitoring costs are increased by virtue of this market structure, and public ownership will become relatively more attractive.

The potential gains from public ownership in this context are an example of a more general phenomenon identified by Alchian and Demsetz. They argue that firms are a specialized market institution for collecting, collating, and selling input information, thus serving as a highly specialized surrogate market. Intelligent government regulation of private sector activities may not be attainable without this information, and the least costly way of obtaining it may be for the government to enter the industry as an employer of factors itself. Only in this way may the government be able to obtain the specialized information and expertise required to improve the quality of public policy making in the area. The case for Petro-Canada in the petroleum industry has often been advanced on this basis.

Another context in which market structure may favour public ownership is where the government is the primary purchaser of the product of the industry. In these cases, which may display certain attributes of bilateral monopoly, the strategic and gaming costs of contracting with private firms may be high, and the attractions of vertical integration for the government are increased. As a result, the government as public purchaser may wish to integrate by becoming public producer in the form of a Crown corporation to achieve the economies available through vertical integration. Certain of the wartime Crown corporations might be explained in this way [see Borins, forthcoming].

Legal limitations on substitute instruments – Certain legal factors may limit the effectiveness of the various substitutable regulatory instruments as techniques for aligning private sector activity with specified public objectives, thus favouring the choice of public ownership as the instrument of intervention.

In sectors of economic activity where the constitution allocates regulatory authority to the federal government, a provincial government is deprived of the ability to use direct regulation as a technique of intervention and may therefore choose public ownership as the only instrument available to it for participating in public decisions in such sectors. For example, since the regulation of aeronautics is a federal responsibility under the division of powers in the constitution, a provincial government's only opportunity to participate in this sector may be through public ownership of an airline. Alberta's purchase of PWA is consistent with this proposition.

Similarly, regulatory constraints on institutional behaviour, which may in general be well justified in terms of the intended policy objectives, may create special situations where public ownership, or at least public participation in business activity, becomes advantageous [see Mintz, 1979]. For example, limits on the voting stock of companies that can be held by banks and similar limitations on the voting stock that may be held by life insurance companies or trust and mortgage loan companies, together with the usury-type rate ceiling laws applicable in other cases, may create imperfections in capital markets that inhibit the supply of risk capital to certain kinds of ventures that the government wishes to see encouraged, such as small businesses. This may create a rationale for the government to provide this capital itself, either in the form of loans or equity. The creation of the Federal Business Development Bank and the Ontario Development Corporation can be partly explained in these terms.

Functional limitations on substitute instruments: uncertainty, flexibility, and reversibility – The very nature of direct regulation limits, in a functional sense, its effectiveness as a mechanism for aligning private sector activity with desired public objectives. To the extent that these limitations are substantial in a given context, the Crown corporation instrument becomes relatively more attractive to decision makers. These orders may appear in the form of decisions of regulatory tribunals; rules and regulations under statutes; terms and conditions under contracts; undertakings given in memoranda of understanding or agreement; and conditions and qualifications attached to the receipt of public assistance. Regardless of the particular form in which they appear, however, legal orders require definition and specification of a private firm's future conduct. As a result, in situations where setting such definitions or specifications is difficult, or impossible, direct regulation becomes less effective and public ownership relatively more effective. While Crown corporations also require direction, these directions can be constantly evolving, communicated less formally and less openly, and stated with less precision; and they need not anticipate accurately the financial consequences of the required conduct.

The primary situation in which the limitations of legal orders as a regulatory device will become apparent are situations where the regulatory objectives are evolving or uncertain. This will arise most commonly in situations of relative novelty, whether because of new technologies or new environmental considerations. In these cases, the costs of a proposed undertaking are likely to be highly uncertain, and the particular objectives that the firm will be required to attain are likely to be extremely difficult to state. This state of uncertainty will be magnified in cases where the objectives can only be stated in a general way. For example, an objective in a particular building project, such as Telesat, may be to have the largest possible Canadian participation in the supply of materials, parts, and services. The objective "large as possible" cannot be reduced to a percentage or dollar amount in advance, because of uncertainty about the availability of suppliers and the terms on which they will be able to supply. To a private firm faced with the necessity of forecasting the financial consequences in advance in order to assure a profit, this uncertainty may cause unacceptable degrees of risk in its financial projections. A public firm assured of financial support as the actual degree of Canadian participation clarifies over time may not share the same concern regarding this uncertainty.

These considerations may be particularly important in the regulation of enterprises such as railways, airlines, and electric utilities that serve a central economic function such as providing an infrastructure

service that the government wishes to use as a vehicle for supplying incentives and disincentives for other economic activities. In these cases, the policies of the firm must vary in response to the continually changing circumstances of the secondary industries, and policy judgments may be required on a virtually continuous basis. In a situation requiring these marginal adjustments in policy on a frequent basis it may be extremely difficult to issue a continuous stream of legal orders to dictate the behaviour of the private firm, to calculate the financial implications of each order for the private firm, and to compensate the firm appropriately. In such a case, a publicly owned firm, not constrained in the same way as a private firm by the financial implications of policy changes, may be relatively more attractive.

More generally, the ability of a government to reverse policy decisions effectuated through a Crown corporation in a low-visibility, informal, incremental way minimizes the political costs associated with more public and deliberate acknowledgments of governmental error.

Low-visibility taxation – By combining in a Crown corporation a set of activities or objectives, some of which are not financially self-sustaining, politicians may be able to realize political advantages through the imposition of a form of tax (cross-subsidization) that has low visibility for the bearers of it (i.e. it never appears on the government's books) and yet at the same time is raised relatively efficiently through "businesslike" management of the tax-bearing resources. This strategy will generally require the conferring of a government-sanctioned monopoly of the profitable activities on the Crown corporation to prevent entry and the competitive erosion of the capacity to cross-subsidize.

Even where a government provides direct subsidies to Crown corporations, whether in the form of capital grants, forgivable loans, loans at below-market interest rates, or guarantees, these may be perceived by the cost-bearers (taxpayers) as being within the normal investment functions of a shareholder and designed to produce a long-term return rather than to provide a subsidy to employees or customers of the corporations (as may, in fact, be the case).

As Borcherding [forthcoming] has argued, public ownership compared with private sector regulation as an instrument of redistribution is less open, more flexible, and more selective. These are important political properties, and to the extent that they are systematically more available through Crown corporations, they should play a substantial role in determining instrument choice.

Symbolism and ideology – Public ownership is a symbol of philosophical and ideological preferences. Its symbolic connotations appear material in a number of contexts. For example, in situations in which the government is providing very substantial public support to a private firm, the politician may perceive a risk that if the firm were, at some future date, to make a profit the government would be accused of having used public funds to generate private profit. Therefore, in situations where the public support of the industry or firm is so substantial that the residual private contribution to the firm's potential success is minimal, the government may wish to own the enterprise in the form of a Crown corporation so as to capture any potential success of the firm. To put it another way, in situations where the government assumes virtually the entire down-side risk of an enterprise, it may also wish to capture up-side risks so as to avoid potentially damaging political criticism, now or in the future, of "corporate welfarism." Simply undertaking to tax up-side profits in the future may not be perceived by voters as an even "trade." Similarly, issues of foreign ownership may have high symbolic content, and in those cases where there are no existing or potentially available Canadian enterprises to provide certain services or goods, the government may have no realistic alternative other than to create a Crown corporation. The creation of Trans-Canada Airlines (the predecessor to Air Canada) could be partially explained in these terms [see, generally, Ashley and Smails (1965), pp. 26ff].

Public ownership may also be attractive as a way of symbolizing and dramatizing a government's commitment to a particular cause or set of values. In some situations, even if it were possible for the government to regulate the private sector activity so as to achieve its objectives, it may be too difficult to generate public confidence in, and understanding of, this reality, and an assertion of public ownership may be the only way to communicate sufficiently clearly the government's commitment to a particular public objective.

National security and international relations – A number of other characteristics of public ownership may sway the decision maker's choice of instrument in particular circumstances. First, the opportunity for decision making with a relative degree of secrecy may make public ownership particularly suitable in situations involving national security and substantial amounts of confidential information.[3] Second, in situations where Canada's international relations will be affected by a firm's conduct and where Canada's international posture is intimately related to a range of other international objectives, public ownership

may offer the only reasonable vehicle for operating in the international sector, in order to internalize the decision making and to permit Canada to speak with a single voice.[4]

Competing considerations – While the cost of monitoring private sector activity is a major factor favouring the utilization of public ownership, the concept of monitoring costs is also the source of major factors that militate against the choice of a public ownership policy instrument in many circumstances. First, as the literature on the theory of the firm points out, while a firm may be able to economize on some of the monitoring costs faced by an entrepreneur in purchasing factors through independent contracting, new and different kinds of monitoring costs are created within the firm by virtue of the attenuation of the relationship between factors, pecuniary income, and his productive activities. While with respect to his pecuniary income, he tends to become indifferent to the allocation of his productive activities and more susceptible to centralized control, the costs of enforcing constraints against consumption on the job in a centralized organization increase. As McManus points out, there are always some opportunities in any organization to direct one's activities to non-pecuniary forms of consumption. Thus there will be an increase in monitoring costs associated with specifying and enforcing non-pecuniary constraints.[5] Relative monitoring costs within and outside a firm will largely determine the method of economic organization. At the public-ownership/private-sector regulation boundary, this implies that while the government will face monitoring costs in attempting to regulate, or otherwise influence, private sector activity, offsetting monitoring costs must be confronted in the event that these activities are internalized.

A related factor militating against the choice of public ownership as a policy instrument derives from the concept of the residual interest maintained by the controlling owners in a private sector firm. It will be recalled that Alchian and Demsetz in part explain the emergence of firms on the basis that the firm structure creates incentives for the residual claimants of firm income to develop specialized monitoring skills. In comparing a publicly owned enterprise with a privately owned enterprise, clearly these incentives are attenuated. Where the residual claimant is the government, there is no cohesive set of individuals who stand to be financially advantaged by more efficient, rather than less efficient, monitoring. If one conjectures that designated representatives of government, such as a particular minister, are assigned responsibility for the oversight of publicly owned firms, such representatives do not possess the financial incentives possessed by owners of private sector firms to ensure efficient monitoring. As Alchian and Demsetz argue in the case of mutual and non-profit firms, the future consequences of improved management are not capitalized into the present wealth of stockholders, so to that extent monitoring incentives are weakened.

This point runs the danger of oversimplifying the incentive structures facing political overseers of publicly owned activities, because while there may be no economic returns to efficient management, there are presumably political returns. As Becker [1976] and Breton and Wintrobe [1979] have pointed out, politicians derive no returns from waste *per se*; indeed, they run political risks from acquiescing in it. It can probably be accepted, however, that the ultimate "stockholders" in publicly owned firms (i.e. the voters) have sufficiently small stakes in whether such corporations are well or badly managed and face sufficiently high information costs in ascertaining which is the case that the penalties attaching to weak monitoring in the public sector are significantly less exacting than those obtaining in the private sector. This proposition will not always hold. The strength of the monitoring incentive created by the owner's residual interest in a private sector firm is directly related to the extent to which the magnitude of his residual claim varies with his performance. Therefore, in situations where government involvement in a private firm, in the form of loans, subsidies, grants, and the like, is extensive, the residual incentive may be severely diminished by the magnitude and pervasiveness of the public involvement. In extreme cases, the private "owner" may become little more than a manager, with very severely attenuated concerns for efficiency. In these cases, public ownership may be relatively more attractive, as it then permits explicitly bureaucratic forms of incentives to be created for proper performance by the firm's managers.

To this point we have considered only the relative institutional characteristics of public ownership referrable to the public-ownership/private-sector regulation boundary. Within the public ownership modality, we need now to attempt to identify those characteristics which make a Crown corporation a preferred policy instrument to direct ownership/administration of economic resources by an executive department of government.

Crown Corporations versus Departmental Bureaucracies

There would appear to be a number of characteristics of Crown corporations that would favour their utilization over departmental bureaucracies, within the definitional ambit that we have ascribed to

them – i.e. the provision of goods or services to the public at a per-unit price in circumstances closely resembling those under which private sector enterprises operate in the same or similar areas.

Valuing output – As a number of writers, including Von Mises [1969], Downs [1967], and Niskanen [1979; and 1973, p. 10], have pointed out, bureaus of government typically face no economic markets on the output side. Therefore, they have no direct way of valuing their output in relation to the costs of the inputs used to make them [Downs (1967), p. 30]. On the other hand, in the case of organizations facing markets for their output, the sale of outputs in voluntary *quid pro quo* transactions provides an automatic evaluation of the work of the producer. If he can sell his outputs for more than his inputs cost (including normal returns on capital and entrepreneurship as costs), then he knows his product is valuable to its buyers. On the other hand, if he fails to cover the costs of his inputs by selling his outputs, then he knows that his product is not valuable enough [p. 29]. Downs suggests that one of the main reasons why extensive formal rules are necessary in bureaus is that they have no direct measure of the value of their output. On the other hand, "in many cases members of private firms can shape their behaviour on an *ad hoc* basis because they do not need rules to indicate how they can make profits . . . . But whenever there is no clear linkage between the nature of an action and its value or ultimate end, pressure arises for the development of formal rules to help individuals decide their behaviour" [p. 59].

Because the outcome desired by owners of private sector enterprises can be reduced, for the most part, to a simple profit calculus, a ready measure of the performance of an organization and individuals within it is available. To that extent, dependence on extensive formal rules can be reduced. In the absence of such a measure, rules must be substituted. A similar phenomenon can be observed in the regulation of markets for professional services, where clients or patients possess imperfect ability to judge the quality of service outcomes. Furthermore, given the highly particularized nature of professional services, which makes generalized regulation of outputs infeasible, public policies are often reduced to adopting input regulation, such as regulation of the quality of entrants to a profession on the assumption (often tenuous) that there is a high correlation between prescribed training inputs and desired service outcomes [see Trebilcock, Tuohy, and Wolfson (1979), Chap. 4].

There is, however, a significant cost attached to substituting detailed formal rules, focused primarily on inputs, for measures of productivity focused on outputs such as profits. By constraining and prescribing the nature of mix inputs, such rules also constrain the potential for innovation and dynamism in the system. These costs may not be high in many bureaucratic contexts, at least in cases of relatively routinized functions, but in an entrepreneurial setting they are likely to be substantial.

To the extent that Crown corporations are providers of goods or services in market settings, there are obvious advantages to emphasizing output measures of productivity rather than input measures – thus the case for removing such activities from the normal departmental setting. One must assume, however, that to a greater or lesser extent every Crown corporation is intended to maximize some set of policy objectives in addition to (and, indeed, in opposition to) profits. If this were not so, it is difficult to conceive of any reason for a Crown corporation to exist. In relation to these non-market objectives, as in the case of bureaucratic objectives, output measures of effectiveness will be very difficult to specify. To the extent that a Crown corporation is expected to engage in any substantial balancing of market and non-market objectives, the intended joint output may be difficult to specify and measure. Thus politically uneasy, and conceptually untidy, compromises between inputs and output measures of the value of a Crown corporation's activities seem unavoidable. How these compromises are struck is presumably in large part a matter of the relative weights of pecuniary wealth and political arguments in a corporation's objective function. These weights are likely to be reflected in institutional variations within the Crown corporation mode – e.g. in the presence, or absence, of both government and private sector shareholders maximizing competing objectives, or in the choice of accountability regime: whether to schedule a Crown corporation under the *Financial Administration Act* or to leave it unaccountable to government and Parliament in this respect.

Meeting the competition – To the extent that a public enterprise is carrying on activities in competition with private sector enterprises, it is likely to be important that it be able to compete in both input and output markets on terms similar to those which apply to its competitors. Thus, for example, if specialized expertise is required in the management of a public enterprise in order for it to be competitive in managerial skills with private sector enterprises in the industry, it will be necessary for the publicly owned enterprise to be able to offer executive remuneration arrangements and otherwise pursue personnel and hiring policies that are competitive with those prevailing in the industry, rather than be constrained in these respects by public service pay scales or

personnel policies; likewise, in the case of procurement or advertising policies. While the potential for continuous marginal adjustments in policy has earlier been described as an advantage of Crown corporations over private sector regulation, "distancing" Crown corporations from government constraints, to a greater or lesser extent, is what may be perceived by management as political and bureaucratic interference with management prerogatives and with the objective of competitive performance. Excessive "closeness" or "intermeddling" may generate demoralization costs.

"Fair" competition – Somewhat related to the previous point is the notion that if publicly owned enterprises are carrying on market-type activities in competition with private sector enterprises, on the one hand they should be sufficiently removed from the political process to be free to compete without excessive political intrusion, which may compromise unduly this objective; on the other hand they should not be so heavily dependent on preferential treatment by the government that the other firms in the industry perceive themselves to be unfairly prejudiced in the terms on which they are able to compete and may, perhaps, leave the industry. The "distancing" of a public enterprise from the executive arm of government may promote these considerations.

Selective responsibility – In particular cases, politicians will find it advantageous to be able to claim credit for the activities of government or government agencies where these are positive, but at the same time be able to establish some distance from these activities where there are zero or negative political returns. The Crown corporation structure facilitates this "distancing" strategy to a greater extent than a departmental bureaucracy, where the principle of ministerial responsibility severely circumscribes its utilization.

Symbolism and ideology – To the extent that a government wishes to espouse, or at least to appear to be espousing, a political philosophy of "keeping government out of business" or "reducing the size of government," the Crown corporation mode of organization may offer some advantages over direct departmental responsibility for the same activities.

Competing considerations – The one major cost of adopting the Crown corporation mode over a departmental bureaucracy for organizing economic activity is that to the extent that non-market objectives are assigned to Crown corporations involving outputs that cannot be readily specified or measured, the greater distance between political decision makers and a Crown corporation, in contrast with a bureaucracy, may increase the monitoring costs faced by government in effectuating its policies. Moreover, to the extent that competitive conditions in an industry in which a Crown corporation is operating will compel remuneration arrangements for executives that are tied to market measures of effectiveness and productivity, and to the extent that executives perceive their future value elsewhere in the industry as likely to be judged largely in these terms, incentive effects are set in motion to maximize market objectives over non-market objectives in much the same way as may have led politicians to reject private sector regulation in the first instance. The presence of non-government shareholders in a Crown corporation may exacerbate these effects.

Substitutability

This analysis of the legal and institutional characteristics of Crown corporations serves to identify the critical factors determining the substitutability of Crown corporations for other instruments. There are three dimensions to this substitutability. First, within the class of instruments defined as Crown corporations there is considerable variation with regard to the legal attributes of the corporation. As the discussion of the definition of Crown corporations indicated, there is no single legal model at the federal level for Crown corporations. Although current reform proposals, which are referred to below, would reduce this variability in legal characteristics, there is no doubt that to date the existing variability permits substitution. This substitution permits the decision maker some range of choice, even after the decision to utilize a Crown corporation as the instrument of intervention in a particular situation.

The second dimension of the substitutability of Crown corporations for other instruments relates to alternative forms of public enterprise. That is, once a decision is taken to produce goods or services publicly, a second choice must be made between the corporate form and the departmental form of production, since the two are close substitutes. At this point, the legal and institutional characteristics identified above, which distinguish Crown corporations from departmental bureaucracies, become the critical factors influencing the choice calculus.

A current, prominent example illustrating this second dimension of substitutability relates to the continuing controversy over the appropriate form of organization for the Post Office. While previously organized as a department, recent legislation [Bill C-42, 1980] has effected a shift to a Crown corporation, adopting in statutory form the apparently widespread belief that a shift to a Crown corporation would bring substantial gains to the public [Report of Study Group, 1978]. Simultaneously in the United States, however, various legislative proposals call for

converting the U.S. Postal Service, a public corporation, into a Post Office Department [for a general review of current proposals, see Amercian Enterprise Institute, 1977]. The impetus for the Canadian change can be traced to both the legal and institutional characteristics of Crown corporations. With respect to the legal aspects, the dominant consideration is that the shift from departmental to corporate status would result in the application of the *Canada Labour Code* to postal service labour relations in place of the existing *Public Service Staff Relations Act* [1970]. This would change the processes for the resolution of disputes, the determination of terms and conditions of employment, and numerous other aspects of labour relations. In light of the almost constant state of controversy concerning labour relations in the Post Office, it is not surprising that any organizational substitute that holds out the promise of a better era is seen as an attractive instrument. This legal consideration is complemented by numerous institutional characteristics. The Post Office produces a service that is substantially susceptible to output measurement; it operates in an increasingly competitive market; it is a source of constant political embarrassment, which might be reduced through the "distance" inherent in the corporate form; and it is not so integrated with other government policies and programs that the monitoring and co-ordination costs are likely to become oppressive in the corporate form.

The third dimension of the substitutability of Crown corporations for other instruments and the dimension most relevant to this study concerns the substitution of Crown corporations for the other major form of intervention – taxation, expenditure policy, and regulation. We deal with this below in somewhat greater detail.

Substitutability of Crown Corporations for Other Instruments

The very large number of Crown corporations at all levels of government in Canada makes it exceedingly difficult to categorize all the activities they are engaged in. It is fair to say, however, that public ownership has become an important instrument of intervention in the following fields of activity:

1 Natural monopoly regulation, as instanced by provincial Hydros and some provincial telephone systems.

2 Nation building and community development, as instanced by Canadian National Railways, B.C. Railway, Air Canada, and the Canadian Broadcasting Corporation.

3 Moderating economic transitions and stabilizing income, as instanced by the Cape Breton Development Corporation, DeHavilland, Canadair, the Canadian Saltfish Corporation, and the Canadian Freshwater Fish Corporation.

4 The provision of capital funds, as instanced by the Canadian Development Corporation, the Ontario Development Corporation, the Federal Business Development Bank, the Farm Credit Corporation, and the Export Development Corporation.

5 The promotion of national security and security of supply, as instanced by Petro-Canada, Polymer, Telesat, and Eldorado Nuclear.

6 The creation of a yardstick competitor, as instanced by Petro-Canada.

7 The control of externalities, as instanced by the provincial liquor control boards and the federal and provincial lottery corporations.

The utilization of public ownership as an instrument of intervention in these various fields of activity reveals certain patterns regarding the relative importance of the different characteristics of Crown corporations.[6] Certain of the characteristics dominate as choice variables, with monitoring and information costs (Cape Breton Development Corporation, DeHavilland, Canadian Saltfish Corporation, and Petro-Canada), policy co-ordination costs (provincial Hydros, and Cape Breton Development Corporation), structural limitations on substitute instruments (Pacific Western Airlines, and provincial Hydros), functional limitations on substitute instruments (provincial Hydros, Telesat, provincial telephone systems, Air Canada, Petro-Canada, Lotteries, and Liquor Boards), and symbolic effects (Quebec Hydro, CBC, Air Canada, Cape Breton Development Corporation, Atomic Energy of Canada Limited, Lotteries, and Liquor Boards), each being influential in a large number of cases. The monitoring and information costs associated with substitute instruments often make public ownership an attractive alternative, particularly in those cases where the extent of public involvement in the industry is so substantial that the residual monitoring incentives inherent in private ownership have been seriously weakened. The possibility of improving policy co-ordination by internalizing all decision making to the public sector also favours the utilization of Crown corporations in situations where either multiple support programs are being used or the development of the industry in question is integrally linked to other government programs or plans. Structural limitations on substitute instruments have induced the utilization of public ownership where this has enabled provincial governments to exempt local consumers from the effects of

federal taxes (Hydros) or to influence an activity they were otherwise precluded from regulating (PWA). The inherent functional limitations of substitute instruments that depend on the issuing of legal orders, broadly defined, also support the utilization of public ownership in numerous cases, as the limits of direct regulation become apparent in situations involving novelty, uncertainty, evolving policies, and continual marginal adjustments in policy. Finally, in a substantial number of cases the symbolic characteristics of Crown corporations have played an important role in the calculus of choice.

Undoubtedly a full understanding of the dynamics of instrument choice requires an analytical framework even more complex than that presented above. At the same time, however, a systematic consideration of the relevant legal and institutional characteristics of Crown corporations in particular, and instruments of intervention in general, can illuminate the process of choice and focus attention on the meaningful dimensions of institutional change and reform.

Reform Proposals

Two reform thrusts have recently won wide currency in Canada with respect to Crown corporations. First, it has been widely asserted that Crown corporations should be made more closely accountable to the executive and legislative arms of government [see Bill C-27, 1979; Lambert Report, 1979; and Langford, 1980]. Second, it has been asserted in some quarters that a number of existing Crown corporations should be "privatized" by the selling of their shares or assets to the private sector.[7] The calculus of instrument choice described in this study raises some questions about the efficacy of both thrusts.

Proposals requiring greater accountability of Crown corporations to the executive and legislative arms of government imply a substantial movement along the institutional continuum towards closer integration of Crown corporations with line departments of government. While greater accountability may have some benefits, it also has some costs. The factors described earlier in the chapter that might lead rational government decision makers to choose Crown corporations over line departments of government for the management of particular economic activities continue to exist. Recent reform proposals, in effect, shift the boundary between Crown corporations and government bureaucracies and forgo some of the advantages of "distancing" that have hitherto been attainable through the use of the Crown corporation instrument. Moreover, recent reform proposals, in calling for tighter budgetary controls, more explicit commitment to long-term strategic plans, tighter control over the creation of Crown corporations and subsidiaries, and more expansive ministerial directive powers, appear to have a highly homoginizing aspect to them, in applying essentially the same accountability regimes to very broad classes of Crown corporations. But, as we have sought to show, the Crown corporation has in the past displayed wide institutional variations. The flexibility that has been possible in terms of ownership interests, accountability regimes, creation, financing, and so on, has permitted a substantial degree of custom design, whereby a Crown corporation can be fashioned to meet very particular policy needs. To the extent that proposed reforms reduce this degree of flexibility, then again costs in terms of instrumental effectiveness will be incurred. Whether in the light of possible reductions in the instrumental effectiveness of Crown corporations or the substitution effects that proposed reforms are likely to engender, a net increase in social welfare (however measured) can be expected to be open to question.

With respect to the second thrust – privatization – proposals to sell off Crown corporations to the private sector rarely make explicit whether they are motivated by a change in policy objective whereby public involvement in the sector in question is seen to be no longer necessary or desirable or whether, on the other hand, a continuing public sector involvement is thought to be justified, but superior instruments have been identified for effectuating the policy objectives in question. In the latter case, a failure to be explicit about the substitute instruments that will be invoked makes evaluation of the merits of privatization proposals extremely difficult. Such an evaluation would focus on the question of what circumstances have changed so as to change the relative strengths of alternative policy instruments. Thus when Crown corporations are put up for sale, the terms of the sale must include not only the price of the equity or the assets but also the commitments made openly or privately with regard to future government support or regulatory programs bearing on the industry. Undoubtedly, the potential purchasers will require such information regarding future support or regulatory impact; the price they will be willing to pay for the corporations will be directly related to their evaluation of the likely impact of these alternative instruments. It is too easy for a government to inflate the apparent gains from privatization if it proceeds without disclosure of the same information to the public.

A final point illustrated by any proposed reform of Crown corporations is the substitutability of all governing instruments. Once it is understood that the government normally has available to it a number of

instruments that might be utilized to accomplish a particular policy objective, one must not be unduly sanguine with respect to the likely impact of the reform of any one instrument. The government's ability to choose an alternative instrument (unaffected by the reform) provides an opportunity for the potential benefits of the reform to be dissipated through the substitution process. Proposals for both increased accountability and privatization appear to be particularly susceptible to this phenomenon.

7 Regulation

The Range of Regulatory Instruments

Conventional wisdom often has it that our economy is largely unregulated and is disciplined mainly by competitive forces. In many respects, this is a myth. Telephone, rail and airline rates; trucking; foreign investment; energy; insurance; capital markets; broadcasting licences and content; product tariffs; agricultural produce prices and output; banking; food, drug and safety standards; and a myriad of professional and occupational licensing regimes reflect the wide sweep of public regulation in Canada today. Few areas of our lives are now untouched by regulation. In its Interim Report, *Responsible Regulation* [1979, p. 43] the Economic Council of Canada suggested that regulation modifies one or more of the following:

- price, e.g., tariffs, rates, rents, wages, etc.;
- supply, i.e., both output and entry by means of licences, franchises, and permits or by quotas;
- rate of return, e.g., rate-base regulation of public utilities;
- disclosure of information, e.g., content labelling, securities prospectuses;
- attributes of a product or service, e.g. quality, purity, or wholesomeness of food products;
- methods of production, e.g., environmental pollution standards, worker health and safety standards;
- conditions of service, e.g., requirements to act as a common carrier; and
- discrimination, e.g., in employment or in the sale of goods and services.

Many analysts of regulation have come to categorize regulation as either economic ("old") regulation or social ("new") regulation. While the boundary between the two kinds of regulation is far from precise, economic regulation is often taken to refer to regulation of price, rate of return, output, entry, and/or exit [p. 44, see also Stanbury (1980), esp. Chap. 1].

The Economic Council of Canada [p. 44] identifies the following examples of economic regulation:

- *Price* (and price or rate structure) – rent control, telephone rates, electric power rates, taxi fares, price of products sold through supply management marketing boards, airline fares, and wage and price controls.
- *Rate of Return* – pipelines, telephones, local distribution of natural gas.
- *Entry* – broadcasting (AM and FM radio, TV), certain professions and licenced occupations, airlines, trucking (in most provinces), taxis, fisheries, telecommunications (telephones, cable TV), railroads.
- *Exit* – public utilities (e.g., water, natural gas, electricity), railroads, telecommunications.
- *Output* – supply-management type of agriculture marketing boards, the production of oil and gas.

Social regulation is often taken to refer to regulation of more recent origin pertaining to health, safety, consumer, and environmental issues. The Council [p. 45] identifies the following examples of social regulation:

(i) health and safety, which comprises a high proportion of all regulation and includes consumer product safety, transportation safety, and occupational health and safety;

(ii) environmental regulation, which is taken to include areas such as the control of air and water pollution, land use regulation, and the environmental management aspects of resource development;

(iii) "fairness" regulation, which ... refers to "protection against fraud, deception or inaccuracy in the reporting of information," but which should also include all consumer protection and anti-discrimination legislation; and

(iv) "cultural regulation," e.g., Canadian content requirements in broadcasting, foreign ownership legislation, and language legislation.

The ECC continues by stating that "social regulation is aimed at controlling the attributes of a product or service, at the disclosure of information, at influencing methods of production or at influencing conditions of sale or employment." The following examples are then cited:

- Information Disclosure, e.g., product labelling, prevention of misleading advertising, financial disclosure;

- Attributes of a Good or Service: *quality*, e.g., food (grading), pharmaceuticals, licenced occupations; *purity*, e.g., food, drugs, beverages; *wholesomeness*, e.g., food, beverages; *safety*, e.g., children's toys and furniture, health professions; *availability*, e.g. services; *durability*, e.g. minimum wear standards for clothing;
- Methods of Production, e.g., pollution standards, worker health and safety standards, product content;
- Conditions of Sale or Employment, e.g., minimum wage legislation; hours of work, holidays, etc.; anti-discrimination laws re employment, accommodation, sale of goods or services.

The enormously wide range of regulatory instruments that governments have invoked in the past and the infinitely varied circumstances to which these instruments have been applied make generalizations about the factors that influence choice of regulatory instrument very hazardous. Some characteristics of regulatory instruments, however, can be identified, which, over a range of cases, seems important to instrument choice, both in terms of the choices to be made among regulatory instruments as a class and in terms of the choices to be made across the major classes of governing instruments discussed in this study.

Substitutability within the Class of Regulatory Instruments

Within regulatory instruments as a class, the choices facing policy makers in given contexts are likely to be very wide. A large number of instrument variables, each having a distinctive set of impacts on particular interests or values, are likely to require resolution. Without being able to do justice to the subtlety of the calculus that will typically confront decision makers in real world settings, some broad dimensions of choice can usefully be sketched. A crucial choice variable is between direct and delegated regulation. Direct regulation is intended to refer to regulatory regimes that are administered in their entirety by executive departments of government. Delegated regulation is intended to refer to regulatory regimes that are administered, at least in part, by agencies lying beyond the parameters of what is conventionally understood as "the government bureaucracy."

Direct Regulation

Even within direct regulation, important variations in instrument design may be observed. One important dimension of variation is the degree to which the policy in question is specified in the legislation itself. At one extreme, the legislation may specify all important details of the regulatory policy. This can be done in such a fashion that there is little need for rules and regulations to be promulgated in the future and little discretion to be exercised by the enforcement agency in implementing the policy. Moreover, sufficient precision in the initial legislation may leave little room for the courts to vary the application of the policy. Examples (with some qualifications) might be the *Criminal Code* [1970] or the federal *Income Tax Act* [1970-71-72], in which the tax rules, exemptions, and rates are specified directly in the Act itself. Even in this first class, however, the government retains some measure of discretion in the allocation of enforcement resources to the enforcement agency. Clearly, an agency starved of resources will do a less complete job of enforcement than one more generously endowed.

At the opposite extreme, the legislation in question may provide only a brief, general statement of policy, indicating "good intentions," and provide for the details of implementation to be contained in such regulations as the relevant Ministry may promulgate in the future. In such cases, the legislation really only identifies a problem area and empowers the Ministry to take action in dealing with it. The actual policy details are to be worked out by the Ministry in its rules and regulations over time. An example of such legislation is Section 5 of the Ontario *Environmental Protection Act* [1971], which prohibits the discharge of contaminants in an amount in excess of that prescribed by regulations. Similarly, the federal *Hazardous Products Act* [1970] prohibits the manufacture, importation, or sale of products that are determined to be hazardous by regulations promulgated under the Act. The federal *Food and Drugs Act* [1970] and *Consumer Packaging and Labelling Act* [1970-71-72] are similarly structured.

An intermediate alternative is to establish rather general prohibitions in initial legislation and leave the details of the policy to be worked out by the courts in deciding individual cases as they arise in either criminal or civil proceedings. For example, several environmental statutes in Canada contain general prohibitions against the discharge of pollution that is, or may be, harmful in some generally specified way.[1]

The choice among the three degrees of specificity of initial legislation is likely to depend upon a number of factors. Interest groups will ideally prefer to see the concessions they have obtained reflected in detail in the terms of initial legislation. This may be feasible where the costs of these concessions are imposed on infra-marginal voters or marginal voters who are sufficiently diffused or misinformed that they will not perceive the costs. Concessions (or loopholes) in the *Income Tax Act* that reduce the real degree of progressivity in the tax structure substantially below the nominal degree of progressivity are well-known examples of this phenomenon.

In other cases, a general prohibition against a class of activities, such as the discharge of harmful pollution, may have substantial symbolic appeal, especially to diffused interest groups. The government may adopt a simple, broad prohibition that secures the political benefit for the government of being perceived positively by one group of marginal voters as having enacted "tough" legislation and that yet allows for the possibility of the regulations or discretionary enforcement enabling the government to engage in low-visibility moderation of the perceived effects of the legislation. This strategy depends for its effectiveness upon diffused interest groups having to face higher information and organizational costs in monitoring (and participating in) day-to-day formal enforcement activities than they would in the initial process of legislative enactment.

Yet again, uncertainty on the part of the political party in power as to the possible impacts of alternative policies on different interests, and the intensity of voter preferences with respect to these impacts, may argue for non-specific legislation that permits a process of incrementalism in policy making through subsequent regulations or enforcement policy. Finally, non-specific legislation that depends for its policy content on subsequent rulings or regulations may require continuing interactions between a minister, his bureaucratic advisers, and affected interests, so as to facilitate mutually advantageous accommodations (or "trades") between or among these interests.

As between direct and delegated regulation, a high degree of political uncertainty as to either the impact of alternative policies on different interests or the intensity of voter preferences as to these impacts, or the potential for on-going mutually advantageous accommodations between a political party and concentrated interest groups, are likely to argue for direct regulation where politicians can closely monitor and direct the administration of the regulatory regime. Direct regulation may thus be the most responsive instrument to the need to make constant marginal adjustments in policy of the kind that these two considerations contemplate. Where policy objectives have been firmly settled, another consideration may argue for direct regulation. A political party faces monitoring costs in ensuring that its agents are carrying out its policy objectives and not maximizing a set of other objectives (including items in their own utility functions). Bureaucrats may be more easily monitored and directed than more "distant" delegates.

We proceed now to discuss instrument characteristics that may dispose policy makers to delegate forms of regulation, either by statutory regulatory agencies comprised of "neutral" adjudicators or by self-regulating agencies comprised of members of the industry or occupation being regulated.

Delegated Regulation: Statutory Regulatory Agencies

We observe, at all levels of government, the delegation of wide-ranging classes of regulatory responsibilities to so-called "statutory regulatory agencies."[2]

While the term "statutory regulatory agency" enjoys wide currency, a large number of important institutional variants are embraced under its umbrella. Central institutional variables include:

1 Appointment procedures – members of agencies may be appointed at pleasure or for fixed terms.

2 Public participation – public participation in agency proceedings may be facilitated or discouraged by rules on public financing or interventions, rights of access to information, rights or cross-examination, and so on.

3 External relations – with courts, with respect to judicial review; with the executive arm of government, with respect to *ex ante* and *ex post* rights of intervention in agency decisions; and with the legislature, with respect to rights of intervention in agency decisions, budget approvals, regular reporting responsibilities, and periodic reviews of agency performance.

Thus the government, in considering intervention in a market through the instrumentality of a statutory regulatory agency, must decide not only that such an instrument is preferred to alternative instruments but must also resolve variables within this instrument class.

With respect to technical efficiency considerations, the arguments for preferring a statutory regulatory agency to direct regulation by a line department of government would appear to revolve around considerations of comparative expertise. The agency organization may facilitate the utilization of specialized expertise in the analysis of complex problems, partly because of organizational discreteness and partly because a special institutional form permits at least partial exemption from civil service rules on hiring of personnel, remuneration, secrecy, and the nature of decision-making processes.

While many of the regulatory responsibilities entrusted to agencies call for high levels of technocratic expertise in analysing very complex facts, however, the ultimate decisions to be made often involve the reconciliation, or balancing, of very fundamental sets of competing values and interests: for example, private transport versus public transport;

economic growth versus the environment; foreign investment versus so-called economic "sovereignty"; increased energy supplies (e.g. nuclear power) versus public safety; indigenous cultural aspirations versus broadcasting and publishing freedom, and so on. While some aspects of the impacts of alternative policies on different interests are susceptible to technocratic analysis, ultimately the weighing of the strength of competing values and interests involves value-laden decisions of the kind we normally associate with the political process. In making these decisions, agencies often receive little or no guidance from their statutory mandates, which are frequently framed in extremely vague and general terms.

What explanation can we offer for the twin facts of the delegation of value-laden decisions to so-called "independent" regulatory agencies; and the absence of any clear guidelines for decision in agency mandates? First, public pressure may demand governmental response to a problem that is either insoluble or at least not susceptible to any solution discovered so far. Given that doing nothing in the face of a publicly perceived problem is not a political option that a government is likely to consider is open to it, the setting up of a regulatory agency to analyse and, less hopefully, to redress the problem may be the most attractive political solution. Second, if the party in power confronts a pressing problem and identifies solutions to it but none of the possible solutions is politically congenial, delegating the task of making the painful decision to an "arms-length" agency may again be politically attractive. The inter-position of an independent regulatory agency permits a measure of selective political responsibility for its decisions. Third, if the party in power confronts the possibility of a split in its ranks over a difficult policy decision, the only way to avoid damaging disharmony may be to defer and delegate the decision to an "objective third party." Fourth, if the party in power faces uncertainty in determining voter awareness of the impacts of alternative policies on their interests, or the intensity of voter preferences on these impacts, the delegation to a regulatory agency of responsibility for making at least the initial decisions permits some testing of these margins before the government commits itself to a position of its own. Fifth, the creation of a statutory regulatory agency, under a broad policy mandate, frequently dissolves the determination of policy into a multitude of disaggregated, individual decisions. This increases the information and organizational costs faced by diffused interests and facilitates the reduction of the real benefits of the policies to them to below the perceived benefits, and the reduction of the real costs of these policies to below their perceived costs for other interests. Thus the appointment of a statutory regulatory agency, with a broad mandate to make policy determinations in individual decisions "in the public interest," may facilitate the determination of optimal configurations of marginal and infra-marginal voters and of informed and uninformed voters for the purpose of the distribution of the benefits and costs of chosen policies. Finally, process values may militate in favour of the creation of a statutory regulatory agency that can accord affected parties formal and open hearings even though technical efficiency considerations might suggest more expeditious decision-making procedures. For all these reasons, it may be politically rational for a government to delegate wide-ranging policy-making powers to statutory regulatory agencies [see, generally, Trebilcock, Waverman, and Prichard, 1978].

Having made such a decision, a government must still decide how to resolve the various institutional design questions noted above. For example, a government's decision on whether to promote public participation in agency proceedings will determine the relative effects of agency decision making on different interests – i.e. the extent of the "tyranny" of small decisions. Similarly, decisions will have to be made on the relationship between an agency and the government of the day. Where an agency's decisions impact on narrowly circumscribed interests (e.g. a Land Compensation Board), it is unlikely that there will be substantial political advantage to governmental involvement in agency decisions. Similarly, where the regulatory mandate embraces political "hot potatoes," a government may find it rational to foreswear any right to intervene in agency decisions and thus attempt to avoid responsibility for those decisions. In other cases involving agency decisions that have the potential to affect widely cast economic and social interests, it is less likely that the government can afford to accord to the agency an unqualified measure of independence. Judicious appointments to the agency may in part ensure some continuing influence over agency decisions, but it is likely that more direct rights of government intervention will be politically expedient in particular cases. Here, the government must decide whether to invest itself with powers to intervene by way of a directive in advance of an agency decision or to await an unfettered agency decision but invest itself with power to override that decision (or both). Recent commentators, while recognizing the political rationality that often underlies a right of intervention, have argued that process values militate in favour of *ex ante* directives and against *ex post* political review – e.g. Cabinet appeals [see Janisch (1979), p. 46; and Economic Council (1979), Chap. 5]. While this may be true in some cases, a broad-gauge rule to this effect would seem to deny some of the political

advantages associated with the utilization of independent regulatory agencies; thus it is unlikely to be politically appealing. In particular, to the extent that the analysis of technocratically complex facts is a necessary prelude to a rational political judgment and to the extent that there is uncertainty about the impact of a policy on different interests, or about voter preferences and the intensity thereof, it may be rational for politicians to treat an agency decision as a kind of "weather vane." *Ex ante* directives are thus not a perfect political substitute for *ex post* political reviews.

Delegated Regulation: Self-Regulation

One of the options open to a government in considering intervention in a market is self-regulation by producer interests in the market. Paradigmatic examples of self-regulation occur in the professions, although similar examples can be found in institutions such as agricultural marketing boards. We take the professions as our reference point in examining why a government might choose to invoke self-regulation as an instrument of policy.

A case for some form of regulatory intervention in professional markets is sometimes made on the basis of the vulnerabilities of second and third parties. Second parties (clients, patients) often face major informational problems in determining whether they need professional services and, if so, in selecting a competent professional to provide those services. Third parties, because they are external to the relationship between service provider and client, are unlikely to be fully taken into account by these two parties, and are thus likely to be systematically depreciated in professional/client relationships. In some cases, these externalities may lead to significant social costs – e.g. the negligent design of a dam that inflicts damage on downstream communities. Assuming that the potential prejudice to second or third party interests raises a *prima facie* case for some form of intervention, why might governments choose delegated forms of self-regulation (as they often do) rather than direct regulation by the State or regulation by a statutory regulatory agency?

The case of professional self-regulation can be evaluated both in terms of technical efficiency and political rationality. With respect to technical efficiency, the case for professional self-regulation turns on four kinds of considerations: the costs of information, the costs of error, the costs of enforcement, and the establishment of trust. [The following analysis is drawn from Trebilcock, Tuohy, and Wolfson (1979), pp. 82-85; see also Tuohy and Wolfson, 1978 and 1977.] Although there is great diversity in the activities of the different professions, there are common elements as well. In each case, we find the application of a body of knowledge that is systematic and sometimes arcane. This is a knowledge base that, by its nature, can be acquired only by long and arduous training. Second, professional practitioners are numerous, and their clients are even more numerous. Professional services intrinsically involve the application of general knowledge to particular cases; they are therefore essentially individual in scope. Finally, the essence of the professional relationship involves the assumption of an agency role by the practitioner, acting on behalf of all the relevant interests involved in the decision making, the client's interests, and those of third parties. This agency function cannot be established and cannot be maintained in the absence of trust. Professionals must be trusted to act for their clients rather than for themselves, and they must be trusted to be sensitive to the interests of affected third parties. Without trust, professional relationships would founder.

The choice between direct and self-regulation of quality in these professional markets is affected by these characteristics. The determination that a service is of high quality or that a practitioner is adequately qualified can be made only by application of the systematic knowledge base of the profession. If the State chooses to regulate the quality of professional services directly, it may, or course, hire "experts" to assist it in its task. Clearly, however, the acquisition of this information is costly, even if it is facilitated by retaining expert advisers. The delegation of regulatory powers to the profession itself would place the responsibility for quality assurance in the hands of people who have sufficient knowledge to do the job.

The costs of error are also high in some cases. The performance of poor-quality services or, more generally, the certification or licensure of unqualified practitioners may constitute a serious challenge to the public interest. In extreme cases, public health and safety may be imperiled. Even in less dramatic circumstances, the State cannot easily countenance "errors" made in providing quality assurances in these markets. Such errors will, of course, be more numerous when the regulator lacks the information necessary to assess quality correctly. The combination of the high costs of acquiring such information and the high costs of doing without it may argue in favour of delegating the regulatory function to the profession itself.

There are further arguments supporting such a delegation. The fact that professional practitioners are numerous and that their services are myriad

implies that enforcement of quality standards constitutes a formidable undertaking. The strong allegiances to the profession and its norms, developed by members as part of their education and training, serve to enhance compliance with quality standards. In this way, the enforcement costs associated with monitoring and policing legions of practitioners can be substantially reduced by delegating this responsibility to the profession as a whole.

Finally, we note that trust relationships are extremely fragile, especially when they touch on matters of importance. But trust is fundamental to the professional's role; the professional "agent" cannot perform his function without this trust. It may be that individual clients and the public at large are more likely to have confidence in the activities of practitioners when the State has indicated its confidence in the profession as a whole. The delegation of regulatory authority to a self-governing body of the profession signals such trust and thereby reinforces the establishment and maintenance of similar trust relationships at the individual level.

While, for these reasons, professional self-regulation may sometimes be the most technically efficient instrument available for protecting second and third party interests, in many circumstances this seems unlikely to be so. There are substantial risks that a self-regulating profession will be induced, by considerations of self-interest, to adopt policies that jeopardize the interests of second- and third-party interests. These policies may include the protection or promotion of an unjustified professional monopoly over rights to practise (restrictions on entry) or the imposition of restrictions on post-entry competitive practices among members. A recent study of 13 major professions in Canada, undertaken for the Department of Consumer and Corporate Affairs, reports that mandatory fee schedules enhance an average practitioner's earning by 11.8 per cent; restrictions on advertising, another 10.8 per cent; and restrictions on interjurisdictional mobility, a further 4.3 per cent [Muzondo and Pasterka (1980), p. 185]. For 1970, the authors estimate that the total costs to consumers of these restrictions was $347.3 million [p. 127].

These costs are sufficiently serious that many analysts of the professions have found that second- and third-party interests in professional markets that are subject to self-regulation would be better served by either less regulation or direct regulation by the State [see Friedman, 1962; Gellhorn (1976), p. 21; the McRuer Report, 1968; Trebilcock, Tuohy, and Wolfson (1979), Chap. 4]. Despite these criticisms, governments often choose to maintain or extend their use of instruments of self-regulation. What factors might rationally explain this decision?

With respect to considerations of political rationality, several factors may explain the choice of self-regulation in circumstances where considerations of technical efficiency would seem to dictate otherwise. First, self-regulatory regimes to not typically involve any commitment of government resources and therefore do not show up in government accounts or payrolls. Second, while creating an appearance (an illusion) of protection for second- and third-party interests, the government can at the same time create valuable property rights (especially in the case of exclusive-right-to-practise regimes) through the conferment of self-regulating status on a professional or occupational group. The vigour of such a group in prescribing exacting entry standards and restricting post-entry conduct can be held out as symbolizing a strong commitment to regulatory redress of consumer concerns in the market in question, whereas the real impact on second- and third-party interests, once second- and third-order effects of such regulations have been taken account of, may be negative. Once a self-regulatory regime has been put in place, the disaggregated nature of subsequent policy decisions made pursuant to it may increase the information costs faced by second and third parties in evaluating the real benefits of the scheme and increase the organizational costs faced by these interests in participating in, or attempting to influence, these decisions.

Thus there are two factors that will often make self-regulation a politically rational choice of instrument, despite its technical inefficiencies. One is a desire on the part of the political party in power to contain the apparent size of government so as to reduce the risks of offending interests concerning with the growth, size, and cost of government. The other is the potential for conferring perceived (but illusory) benefits on relatively dispersed interests while imposing relatively small real costs and indeed, in many cases, real benefits on highly concentrated interests.

Substitutability between Regulation and Other Classes of Instruments

We do not accord this subject extended treatment in the present chapter mainly because previous chapters have reviewed substitutability between inquiries and regulation, taxation and regulation, and public ownership and regulation. In addition, the companion volume develops some extended examples illustrating instrument choice across the major classes of instruments.

We wish to make only two points in the present context. First, the explanation for the extensive deployment of command and control types of regulatory instruments lies in part in the substantial political advantages they enjoy over other forms of regulation and other classes of instruments. We illustrate this point by reference to environmental regulation. Second, while regulation and other classes of instruments may often be technically substitutable, in many contexts technical efficiency considerations will require a mix of instruments – e.g. a tax instrument reinforced by a regulatory instrument. In other words, instruments may be complements as well as substitutes. Given the need for at least partial reliance on regulatory instruments in these contexts, the political characteristics of the alternative instruments may tip the case in favour of a predominantly regulatory instrument. We illustrate the technical complementarity of instruments along with associated political characteristics by reference to agricultural marketing boards.

The two examples chosen also offer interesting contrasts with respect to the roles of technical efficiency and political rationality in the choice of instrument. In the environmental case, established policy preferences for standards rather than taxes can readily be explained in terms of political rationality though not technical efficiency. In the marketing board case, technical efficiency and political rationality may well both be maximized by existing arrangements.

Environmental Regulation

It has been well established that effluent charges or effluent rights have superior efficiency characteristics compared with the traditional command-and-control intervention [see Anderson et al. (1977), Chap. 2; Baumol and Oates (1979), Chap. 16; and Kneese and Schultze (1975), Chap. 7]. There is considerable evidence that command-and-control types of intervention are inefficient and costly; and they delay technological progress. Yet, in North America, environmental protection is almost universally pursued through command-and-control types of intervention, with little or no use of market incentives. While economists have been critical of the inefficiency of this policy choice, the choice becomes easy to understand, if not inevitable, when one examines political rationality in the terms discussed below.

There are at least five political advantages to command-and-control intervention relative to effluent charges. First, a prohibition against pollution discharge has high symbolic value for politicians because voters identify such a prohibition with taking a strong stand against pollution. A law taxing pollution discharges has much less symbolic value, since it concedes immediately that the activity need not be terminated nor even reduced. Whatever the likelihood that reduced emissions would result from an effluent charge, there appears to be far less symbolic value in saying to a polluter "you must pay for it" than in saying "you must stop it." Thus the benefits perceived by the public are less for an effluent charge than for effluent standards.

Related to this is the information cost of explaining to voters the effect of a policy. It seems plausible that if voters fully understood exactly how effluent charges would work and why they would be more efficient, the effluent charge might acquire political attractiveness. The public, however, frequently rejects the notion that prices affect behaviour at all, and it seems sceptical of the notion that effluent charges would reduce pollution discharge. The cost of eliminating this misperception is likely to be high. There is little motivation for politicians to educate voters in basic economics so that they will eventually applaud an effluent charge policy if the voter will applaud, with equal enthusiasm, a regulatory policy that the politician can offer them now. Thus there is no incentive to change the public misperception unless this can be done at such a low cost that the party that does it will gain a competitive advantage over other parties.

Third, the effluent charge will almost certainly impose greater costs on concentrated interests (that is, polluting firms) than the costs imposed by direct regulation. Direct regulation is frequently ineffective; and, in such cases, it imposes few, if any, costs. When it is effective, the effluent charge will often impose still higher costs on firms because after paying for pollution control they must also pay for discharging remaining wastes.

We have established that the effluent charge presents fewer perceived benefits to the public and greater perceived costs to industry than command-and-control intervention. This combination should be fatal politically. The effluent charge suffers in other areas too, however.

The effluent charge is, in principle, impersonal, imposing the same price per unit of discharge for all sources discharging that pollutant. While this is an admirable marketlike characteristic, it removes an element of discretionary power from the bureaucracy administering pollution control programs. Because discretionary authority is a source of political power, the impersonal market mechanism will be viewed with disfavour by bureaucracies and politicians. It would be preferable for the bureaucracy and political structure to have a strict law that every source would wish exemption from, so that all sources would

engage in negotiations with the Ministry. This would require a large staff and would therefore mean prestige for the Minister and his senior bureaucrats, and it would allow the Ministry to bargain for concessions it deems important in the pollution control process. The economist's notion of an efficiently collected effluent charge, requiring only one clerk to collect the cheques at the end of the month, is precisely one important reason why ministers and bureaucrats might oppose it. In addition, the impersonality of the effluent charge is inconsistent with the desire to confer benefits on, and avoid costs to, marginal voters. In general, imposing strict requirements on some firms will impose high costs on some marginal voters, including the workers and shareholders of some firms; and politicians would prefer to exempt those firms from the policy. This is easier to do with command-and-control regulation, which frequently deals separately with each case, than with an effluent charge that purports to be identical for all sources. Once again, the technical efficiency of the instrument is inconsistent with the political calculus of imposing costs on infra-marginal voters and conferring benefits on marginal ones.

Finally, the traditional command-and-control scheme for pollution control typically imposes more stringent standards on new plants than on existing plants. This creates a barrier to entry and may, in fact, be financially beneficial to the existing firms in the industry. The effluent charge, by contrast, imposes equal costs on all firms, and since new firms can frequently control emissions at a lower cost than the old ones, the burden on older firms will be higher [Dewees, 1980]. Since existing firms are identified and will have some voice in the political process, while future entrants are generally not identified and currently have no voice, the command-and-control approach confers a benefit on some voters, with a cost that is imperceptibly borne by all consumers of the product through higher prices. The effluent charge imposes a dramatic cost on most existing firms, while it will confer a benefit on as-yet-unidentified, potential new entrants. Once again, the traditional command-and-control approach will be politically more attractive, despite the technical efficiency of the effluent charge.

In summary, then, we can see that while technical efficiency strongly favours the effluent charge, political rationality favours the effluent standard on virtually all fronts. One could hardly imagine a policy more politically unattractive than the effluent charge, as compared with traditional regulation. This calculus might change only if the application of command-and-control regulations over a long period of time proved so ineffective that the public became aware of the failure of the traditional policy and began to demand some change in order to increase effectiveness. The demand for change, however, would have to be extremely powerful in order to cause the political system to adopt the effluent charge, because of its political liabilities. In the past, the failure of command-and-control regulation has generally led to more detailed and extensive command-and-control intervention.

Buchanan and Tullock [1975] are among the few economists to have identified the political dimension to this choice between pollution control policies. They suggest that since command-and-control regulations, which are strict for new firms, would be more attractive to industries than an effluent charge, economists should not be surprised at the widespread political rejection of effluent charges. From a policy point of view, the challenge is to create a mode of intervention that has the efficiency characteristics of effluent charges and yet the distributional consequences of traditional regulations, so that the political liabilities can be minimized.

It should be noted that command-and-control environmental legislation involves the various levels of government involvement discussed earlier in this chapter. Several environmental statutes include a general prohibition against harmful emissions, the meaning of which has been worked out over the years in court decisions. In addition to court interpretation of these provisions, their effectiveness is shaped by ministerial discretion in prosecuting the violators of those sections. The same statutes frequently include provisions prohibiting discharges that are in violation of such regulations as may be promulgated under the statute [*Environmental Protection Act*, 1971; as amended *Fisheries Act*, 1977]. This allows the ministries to flesh out the details of policy in formal regulations, away from the scrutiny of the legislative process. It seems likely that public interest groups with limited resources are less effective in monitoring and influencing the promulgation of regulations than they are in affecting the initial legislation. The consideration of a bill may be concentrated in a period of a few months, while regulations may be drafted and adopted over many years. Few public interest groups have the resources to participate in such an extended process. In addition, the drafting of regulations may involve no public proceedings in which such groups are allowed an input. Thus the provisions for control through regulation raises the information and organization costs faced by public interest groups and yields advantages to concentrated interests. In Canada, it is rare to have detailed prohibitions against emissions of indentified pollutants in the legislation itself.

Agricultural Marketing Boards

We observe, both in Canada and elsewhere, extensive use of agricultural marketing boards as an instrument of intervention in various product markets. In Canada, a large range of agricultural products are subject to regulation by marketing boards. These include: milk and dairy products; poultry, including broilers and eggs; fruit and vegetables; hogs; wheat; and tobacco [see Forbes et al., 1974; and Hoos, 1979].

Most of the marketing boards are provincially created, although in some cases they operate as integral parts of a federal marketing scheme designed to regulate the national market. In some cases, the form of intervention is relatively modest, involving little more than collectively sponsored attempts at promoting the product in question by institutional advertising and similar marketing activities. In other cases, marketing boards are vested with supply management powers by legislation; they regulate the prices at which products may be sold by producers, and they restrict entry by allocating limited production quotas to designated producers.

Among the objectives of marketing boards, increasing the size of the market through promotional and marketing activities is relatively uncontroversial, given that it involves no regulation of market prices or output and involves coercion only to the extent that producers are compelled to contribute, by way of levy, to collective promotional activities. More substantial regulatory objectives include the stabilization of farm incomes and the enhancement of farmers' incomes.

With respect to the objective of stabilizing farm prices and incomes, why would one not observe private sector arrangements evolving to meet this demand? To some extent, of course, we do. For example, we observe crop insurance being written, and we observe active markets in certain kinds of agricultural futures, e.g. pork bellies, corn, wheat, and so on. On the other hand, if there is an unmet demand beyond this for some kind of insulation from the vagaries of market prices in agricultural sectors, we should ask why this demand is unmet. The two classic reasons why insurance markets fail are moral hazard and adverse selection; both of these factors may explain the absence of more extensive insurance markets in the present case. The "moral hazard" factor implies that a farmer whose income is insured against all future contingencies has less incentive to do all that is reasonably within his power to generate income, the loss of which is insured. Thus insurance contracts would need to specify the conditions under which pay-outs would occur, including the conditions pertaining to planting, irrigating, fertilizing, disinfecting, weeding, and so on. Moreover, an insurance company would need to invest resources in monitoring compliance with these conditions.

The "adverse selection" factor implies that income insurance would create incentives for persons who are especially high risks (in terms of attaining the income target in question) to seek insurance. Again, an insurance company would face substantial transaction costs in attempting to segregate applicants for insurance into various classes of risks so as to eliminate the adverse selection factor, as well as the elements of cross-subsidization and excessively high premiums for other classes of insured that it implies.

If we consider that private sector insurance markets are likely to be of limited scope because of moral hazard and adverse selection factors, we must then ask how the State is likely to be better able to respond to these problems than the private sector. If the answer is that it is not, but we still observe state-sponsored price or income stabilization programs, it appears unavoidably the case that their rationale involves substantial elements of redistribution whereby farmers are not faced with the full social costs of providing themselves with the "insurance" that they are enjoying. To the extent that moral hazard and adverse selection costs are moved to other cost-bearers, clearly the provision of insurance to farmers through state-sponsored stabilization programs is being subsidized by other consumers or taxpayers. If this is so, stabilization of farm incomes as an objective of agricultural marketing boards, and similar forms of state intervention, becomes a subset of the alternative policy rationale for marketing boards – i.e. the enhancement of farmers' incomes through redistribution from consumers or taxpayers. While consumers or taxpayers will be encouraged to perceive the objectives of marketing boards in pure stabilization terms, for the most part such an objective is illusory.

Even if the stabilization rationale is only likely to support a form of intervention that is attractive to farmers, if some of the costs of underwriting a stabilization (insurance) program are transferred to other cost-bearers, it might be argued that subsidized insurance ought to be provided at least cost (i.e. in the most technically efficient way). At first sight, regulatory arrangements, short of typical marketing board arrangements that involve restrictions on prices and output, would seem better adapted to this objective.

For example, in some jurisdictions in the past, pooled pricing arrangements have been introduced, under which in strong markets, a marketing board,

acting as buying agent for producers, will buy produce from farmers at less than the rates at which the agent is able to resell the produce in the market, with the difference being pooled [see Hoos, 1979]. In weak markets, the marketing board, as agent, pays farmers a price for their produce that exceeds the price that the agent can realize on the open market, the difference being financed out of previous retentions. On the face of it, such a scheme has the advantage of leaving the ultimate market for the produce to work without interference, while risks of fluctuations are pooled as described. As with private insurance markets, however, the administrators of the pooling arrangement face moral hazard and adverse selection problems similar to those faced by private insurance markets, with parties entering the scheme when pay-outs begin but leaving it when contributions are called for. It seems unlikely that such a scheme could be operationalized without substantial supporting regulations specifying contribution obligations and pay-out qualifications. In addition, a pooling scheme geared to levelling out divergences in market prices from some specified benchmark may be poorly adapted to coping with climatic conditions that produce an undersupply of produce, which sells at high prices but, because of the shortage of supply, yields very low incomes. In other words, pay-outs geared solely to adjusting the market price of produce realized by a farmer may be only weakly responsive to reducing variations in his income.

Many of these same difficulties would seem to arise with regulatory arrangements involving maintenance of buffer stocks, where in weak markets an agency buys produce from a farmer at a formula price and then runs down the inventory in strong markets, thus, in effect, acting as a state-sanctioned futures broker. In the absence of supporting regulation to restrict production in weak markets, such a scheme is likely to be financially extended by an obligation to "buy in" all quantities of the produce in question that might be offered at above market prices.

Thus once intervention has been decided upon in a segment of the agricultural sector in furtherance of a stabilization objective (albeit with unavoidable distributional consequences), it is difficult to see how such an intervention can stop significantly short of the arrangements we commonly observe – namely, marketing boards empowered to regulate both prices and output. In this context, Becker's rational expectations hypothesis [1976, p. 245] about the choice of governing instruments appears to have some force. Here, the instrument we observe being commonly chosen may well be the most technically efficient instrument available for the objective in question.

With respect to the redistributional rationale for agriculture marketing boards, as with the stabilization rationale, we can reasonably ask the question: How good are marketing boards at achieving this objective? [For analyses of the redistributive effects of marketing boards, see Grubel and Schwindt, 1978; Borcherding and Dorosh, forthcoming; McManus, 1978; and Broadwith, Hughes and Associates, 1978.] In many respects, they exhibit serious shortcomings. First, it is extremely difficult to operationalize a set of criteria that identify precisely the target class of beneficiaries under the scheme. If the target class is some intuitive notion of a class of "struggling family farmers," how is the intuition translated into policy? If one settles on an income ceiling, how can one be sure that farmers falling beneath that ceiling are not there as a matter of conscious choice (e.g. hobby farmers, "back-to-the-land" health addicts, and so on) or simply highly inefficient producers who possess resources that are capable of substantially more efficient exploitation?

If the target class can be defined in an operational way and the benefits of the program confined to that class, questions then arise as to what beneficiaries must do to continue to qualify for the benefits of the program. Suppose they stop producing altogether or fail to incorporate the most efficient production techniques available? Is there any penalty for these failings in terms of discontinuing participation in the benefits of the program? Does one allow initial beneficiaries to trade their rights to benefits under the program (e.g. production quotas) to other parties (at a price) on the sale of their property, irrespective of whether the transferees would, in their own right, qualify under the program? Even if transfers are confined to the same target class, the trading of quotas will lead to early capitalization of the benefits, and subsequent entrants will receive a normal rate of return, unenhanced by any effective subsidy [see Tullock (1975), p. 671]. This may lead to continuing demands for escalation in the scale of the subsidies, although if the subsidies come from monopoly profits there is only one level of output that maximizes group profit. Further restrictions on ouput reduce group profits and leave the demands unmet. On the other hand, to not allow trading of quotas would sharply reduce the incentives of the holders to invest in improving their properties.

Thus marketing boards are likely to generate both allocative and distributional effects at variance with their avowed policy purposes of stabilizing or enhancing the income of family farmers. Less efficient forms of production are encouraged. The benefits are often conferred on large farmers as well as small farmers

and are financed regressively by both poor and rich consumers.

All of these considerations suggest that marketing boards as a form of intervention in agricultural markets are a very blunt and crude instrument for achieving their avowed goals. Here again, however, Becker's thesis [1976] seems to have some force. When the alternative instruments are analysed [see Forbes, 1974; Hoos, 1979; Broadwith et al., 1978; and McManus, 1978], it is clear that each exhibits major shortcomings as a method of enhancing farm incomes. The proposal often made for providing for substantial consumer representation on farm marketing boards is tantamount to a repudiation of the principal purpose of such boards – i.e. to enhance farm incomes at the expense of consumers. Another proposal sometimes made, that the boards should comprise direct and independent appointees of government, ignores certain other political realities. A marketing board comprising farmer representatives elected by fellow farmers would appear to have twin advantages. First, from the perspective of a farmer subject to the jurisdiction of such a board, its credibility and legitimacy is likely to be enhanced by this form of representative government. From the government's point of view, administration and monitoring costs may be reduced by a form of regulation (and coercion) administered by representatives of the regulatees, compared with a scheme administered by bureaucrats. Moreover, government can take credit for board activities, while shifting any blame. From the point of view of consumer interest, both the political party in power and farm interest groups can adopt the strategy of characterizing the nature of a board's decisions as largely technocratic, rather than distributional, thus calling for a great deal of "inside expertise." The proposal often made that marketing boards should be replaced by a system of direct cash subsidies, financed out of general tax revenues, which would leave the market mechanism undisturbed, thus achieving the best of both allocative and distributional worlds, seems similarly suspect. As Becker points out, a cash subsidy scheme, without quotas or other forms of entry restriction, would lead to undesired entry by producers seeking to take advantage of the program. Moreover, the problems that arise with marketing boards, as described above, in defining qualifying criteria for those already in the market and in specifying conditions to be complied with for continuing receipt of benefits under the program, would also arise under a cash subsidy program.

Apart from technical efficiency considerations, in terms of political rationality, the benefits being conferred on producers by a cash subsidy scheme (and thus the costs thereof) are likely to be somewhat more visible than redistribution by regulation. Transfers would show up in government accounts and would need to be voted on by Parliament or the Legislature on a regular basis. Finally, it is not clear that the symbolic connotations of regulatory redistributions and direct cash transfers are the same. Lewis Engman, former Chairman of the U.S. Federal Trade Commission [cited in Trebilcock, Waverman, and Prichard (1978), p. 45], states:

> From time to time, proposals have been made to provide direct cash subsidies in lieu of the patchwork of regulatory subsidies that now pervade our economy. Opponents rise indignantly to object that hardworking individuals and businesses do not want handouts. Well, a rose by any other name .... Our airlines, our truckers, our railroads, our electronics media and countless others are on the dole. We get irate about welfare fraud. But, our complex systems of hidden regulatory subsidies make welfare fraud look like petty larceny ....

Despite Engman's view, it is not clear that direct cash subsidies and regulatory subsidies are, in the eyes of the recipients, a "rose by any other name." To the extent that direct cash transfers carry analogies to welfare payments or "the dole," they will have lower symbolic value to the recipients than less humiliating forms of benefits.

For all of these reasons, technical efficiency and political rationality, with respect to both stabilization and redistributive rationales for intervention, push in the direction of agricultural marketing boards vested with extensive power to regulate both prices and output.

Regulatory Reforms Affecting the Choice of Instruments[3]

The issue of choice of regulatory instrument was addressed in some detail by the Economic Council in its Interim Report [1979]. The Prime Minister's letter of reference to the Council of July 12, 1978 specifically requested that attention be paid to this matter. He asked [p. 119] that studies focus on, *inter alia*:

- an analysis of the objectives of regulation;
- an analysis of the techniques and alternative methods of effecting regulatory objectives; [and]
- a determination of whether or not regulation is on balance in the public interest and, if so, whether superior regulatory alternatives are available for obtaining the objectives of regulation with less adverse economic impact.

The Economic Council takes up this refrain in its Report, in a section entitled "Asking The Right Questions," under which it states [p. 31] that "the level of public dissatisfaction with the current state of

regulation in Canada is evidence of the need to take a more *analytical* approach. This can be done by asking some simple, searching questions." The questions then identified [pp. 32-34] are: 1/ What are the objectives of government regulation? 2/ What are the alternatives? 3/ What are the consequences of each alternative? 4/ Which is the preferred alternative? 5/ Has regulation been effective? The Council notes [p. 34] that "strategic thinking about regulation requires that we periodically scrutinize regulatory programs to determine if they have been effective (met their objectives); to determine if less costly or less restrictive means can be used with the same or greater level of effectiveness; and finally to see if the problems that prompted the government action still exist." The Interim Report [Chap. 6] then goes on to develop some elaborate recommendations for more stringent *ex ante* and *ex post* assessment of the costs and benefits of regulation, to determine, *inter alia*, whether "other means could be used to achieve the same objectives" [p. 79].

We have major reservations about the impact that these proposals are likely to have on patterns of regulation, if implemented. They do not appear, in any substantial way, to change the political dynamics that shape decisions on regulatory policy and therefore seem unlikely to induce substantially different policy outcomes [see DeMuth, 1980; and, more generally, Wildavsky (1967), p. 30; Schultze, 1968; Courville, 1980; and Dorfman, 1976]. *Aggregate* costs and benefits are of little interest to politicians. What is important is the distribution of the costs and benefits, but only insofar as they further the vote-maximization objective i.e. where possible, benefits are conferred on marginal voters; costs are imposed on infra-marginal voters; and information asymmetries among voters are fully exploited. That is to say, the distribution of costs and benefits should magnify gains and depreciate pains. Cost-benefit analysis is at best only indirectly relevant to this calculus. The Council's recommendations, however, may have some impact on the political dynamics in two countervailing ways: first, cost-benefit assessments may reduce the information costs faced by diffused interest groups in ascertaining the impact on their interests of alternative policies by subsidizing the provision of information; second, the review processes contemplated by the proposals will substantially increase the organization and participation costs faced by diffused interests in attempting to influence policy. As the Economic Council itself recognized [p. 82], to propose extensive review processes without at the same time addressing the consequences for interest group participation in the policy-making process may be in fact to leave these diffused interests in a worse position than before the implementation of the proposals.

Another set of reform proposals that has won wide currency, unlike those adopting a cost-benefit orientation, would recognize the vote-maximizing incentives of politicians but attempt to constrain political choices by imposing substantially similar oversight and accountability regimes on all classes of governing instruments. These proposals are aimed at foreclosing substitution effects induced by the different political characteristics of the various classes of governing instruments.

For example, tax expenditure budget proposals would recognize tax concessions as a close substitute for direct expenditures and would subject them to similar approval and oversight procedures. Imposing such constraints on the use of tax instruments, however, is likely to induce governments to substitute away from tax instruments and towards regulatory instruments [DeMuth (1980), p. 15] and perhaps, in some cases, public ownership. In recognition of these substitution possibilities, we now observe proposals being advanced for the introduction of regulatory budgets and greater political accountability of Crown corporations. Regulatory budget proposals contemplate that departments and agencies of government should be required to secure approval of budgets, specifying limits to the costs that the regulatory programs of a department or agency can impose on the economy. The approval process would be similar to that applicable to direct expenditure budgets. Proposals for greater accountability of Crown corporations contemplate moving the financial and administrative oversight regimes for Crown corporations closer to those applicable to line departments of government, presumably in part to reduce governmental incentives to substitute less accountable forms of government organization.

At a conceptual level we find ourselves much more in sympathy with the general thrust of this set of proposals than with proposals requiring extensive cost-benefit assessments of regulation. The former proposals at least have the virtue of proceeding from a realistic appreciation of the choice calculus facing politicians. At an operational level, however, we have serious doubts as to the feasibility of proposals for tax expenditure and regulatory budgets. Methodologically, comprehensively measuring all tax expenditures and regulatory costs presents difficulties of mind-boggling proportions. For example, in the case of a tax expenditure budget, what is a tax expenditure?[4] To answer this question presupposes the identification of some ideal tax system, from which divergences can be identified and measured. But there is no agreement on such a system [cf. Shoup

(1969), Chap. 23]. For example, suppose the tax rate for small businesses is lower than for larger businesses? Is this a tax expenditure?

In the case of a regulatory budget, measurement problems would be even more acute [see DeMuth (1980), p. 29]. Costs of regulation comprehend much more than mere compliance costs (which may be the least significant but most easily measured class of cost) and include welfare losses and less tangible losses in the form of a reduction in individual freedom of choice. We take two specific examples to illustrate the difficulties. First, in the case of the mandatory union-dues check-off legislation recently enacted in Ontario [see amended *Labour Relations Act* (1980), sec. 36A(1)], how would one begin to estimate the possible cost to the economy over time of this legislation? Second, in the case of the criminal law and other "law and order" laws such as censorship, what are the private costs imposed by these laws?

The incentives for strategic behaviour on the part of affected interests with either kind of budget would seem substantial. With a tax expenditure budget, politicians, bureaucrats, and beneficiaries would have powerful incentives to understate the size of the expenditures. With a regulatory budget, industry would have strong incentives to exaggerate the costs, while politicians in power and bureaucrats would have strong incentives to overstate aggregate costs *ex ante* (to secure the highest possible limit on regulatory "expenditures") and to understate the costs of particular programs *ex post* (to permit more programs to be undertaken). Moreover, to the extent that some kinds of costs were systematically excluded, political incentives would be created to substitute towards instruments that conceal such costs. As well, the imprecision of the processes involved would be bound to provoke persistent conflicts among competing interests and to generate large social costs in their administration.

In the case of proposals to strengthen the oversight and accountability regimes applicable to Crown corporations [see Langford (1980), p. 76] compelling arguments can be advanced for minimizing differences in the accountability characteristics of different forms of government organization so as to reduce substitution incentives. Greater accountability is not costless, however. Assimilating Crown corporations more closely with government departments in this respect implies a more bureaucratic and less "businesslike" orientation towards their management. This will tend to influence incentive structures within Crown corporations and may lead to less emphasis on efficiency and competitiveness. Also, a homogeneous accountability regime for large numbers of Crown corporations performing widely disparate functions reduces the advantages of flexibility and institutional "custom design" that have been major factors influencing their utilization in the past.

Yet another set of reform proposals would attempt to place absolute constraints on a government's ability to invoke some or all of the major classes of governing instruments. The previous set of proposed constraints on instrument choice are contingent only – contingent on satisfying common oversight and approval requirements. In contrast, other reform proposals contemplate constitutional constraints on a government's choice of instruments. For example, Proposition 13 in California, which took the form of an amendment to the State constitution, forecloses the use of certain taxing instruments. We would predict that one of the major effects of selective constraints of this sort will be substitution of other instruments (not necessarily less government). If, as with the previous set of reform proposals, attempts are made to impose similar constraints on all the substitutes, similar operational problems are likely to arise. Regardless of how these methodological problems might be resolved, the effective curtailment of all substitution possibilities in an absolute, and not merely contingent, sense raises profound philosophical issues as to the desirability of imposing constitutional constraints on the scale and scope of government [see Buchanan, 1975].

8 Concluding Observations: What Is Responsible Regulation?

Two issues lie at the heart of most debates over regulatory reform: 1/ Is state intervention, in a given context justified? 2/ If it is, what should be the instrument of intervention?

Both issues are extremely complex. The first, which we have not directly addressed in this study, invites debate about the appropriate rationales for regulation and the role of the State in the economy. In particular it asks whether state intervention should be restricted to correcting for economists' notions of market failure or whether it should extend to broader issues, especially the resolution of intergroup conflict, often over distributive issues. The Economic Council of Canada, in its Interim Report, *Responsible Regulation* [1979], while arraying various normative rationales for regulation, avoids attaching any set of weights to them and does not indicate which of them it considers can feasibly be pursued within the framework of existing political incentive structures.

The second issue – the choice of instruments (the subject of this study) – is in many ways as complex as the issue of whether to intervene at all. The Council addressed this second issue in some detail in its interim report.

Recall that in Chapter 1 of this study we argued that two major aspects of regulatory reform are bound up in an understanding of the calculus of instrument choice. First, we need to understand the constraints under which policy makers (especially politicians) choose instruments of intervention, so that recommendations for reform designed to effect a different matching of objectives and instruments either recognize or change those constraints. Second, we need to understand what considerations render instruments good or bad substitutes for one another in the calculus of the policy maker (especially the politician) so that instrument-specific reforms will not be rendered futile by the substitution of other instruments. Little in the Council's interim report bears directly on this second issue. Because the Council's interim report bears much more directly on the first reform issue – the considerations that should inform the choice of instrument – we confine the balance of our concluding observations to this aspect of the Council's thinking.

It is submitted that the Council misconceives the nature of the political calculus being brought to bear both on the choice of regulatory objectives and the choice of regulatory instruments. If one accepts, as we and many other commentators have asserted, that politicians, by and large, seek to promote one primary objective – vote maximization (their prospects of election or re-election) – then we must ask where such an assumption is likely to lead on the issue of instrument choice. It is not a sufficient recognition of the vote maximization hypothesis to recognize, as the Council does, that many regulatory interventions may be animated by distributive considerations and then ask if the distributive objectives are being advanced in the least costly or least restrictive way. The objective of a party in power will not simply be to redistribute wealth to a particular class of voters by the least-cost means. We have argued that the choice of objective, or end, and the choice of instrument, or means, are not independent decisions. Because the promotion of one set of interests or values almost invariably involves trading off other sets of interests or values, choosing objectives and instruments are, in a political perspective, interdependent exercises. Moreover, the capacity of an instrument to exaggerate benefits while depreciating costs in the perception of voters is an important determinant of instrument choice in a vote maximization perspective. We have argued that rational instrument choice involves several key variables. These variables all derive from the existing political constraints under which politicians choose instruments. Instrument choice is rational, in our terms, because it recognizes these constraints, not because it is welfare-maximizing or otherwise socially commendable. We are not, therefore, to be taken as condoning, in a normative sense, the present calculus of instrument choice; rather, we are concerned with describing the facts of life, pleasant or otherwise. In this perspective, the following variables presently seem to influence instrument choice.

First, rational instrument choice involves, to the maximum extent possible, the deployment of instruments that confer benefits on marginal voters and impose costs on infra-marginal voters. Second, rational instrument choice must take account of imperfect information on the part of both voters and political parties. Political parties will respond to voter ignorance by choosing instruments that provide highly concentrated benefits to marginal voters while imposing widely dispersed costs on other marginal voters (where costs cannot be confined to infra-marginal voters). As well, the provision of subsidized, selective information, along with symbolic reassurances, will seek to expand perceived benefits over real benefits and reduce perceived costs below real costs. In short, a strategy that seeks to magnify the gain and depreciate the pain will be influential in instrument choice. In addition, recognition of the imperfection of the information available may lead political parties to the selection of instruments that maximize reversibility and flexibility by providing opportunities for continuous marginal adjustments in policy "objectives" (the balancing of conflicting political interests).

If these factors are entered in a political party's objective function and then one asks the same question as did the Prime Minister, in his terms of reference to the Council [Interim Report, p. 119] – are there "superior regulatory alternatives ... available for obtaining the objectives" of regulation? – we are forced to recognize the fundamentally political and nontechnocratic nature of this question. The objective of vote maximization, as applied to a particular policy context, including the choice of "superior regulatory alternatives," involves selecting instruments that not only produce superior configurations of marginal beneficiaries and infra-marginal cost-bearers but also more fully exploit information asymmetries among voters.

How can the Economic Council of Canada be expected to advise governments authoritatively on this issue? Moreover, given the vigorous competition among political entrepreneurs (parties) with high stakes in calling these margins accurately, do we have any reason for supposing that, in general, the choice of instruments that we presently observe in place is, in a political perspective, non-optimal? Short of changing in fundamental ways the "constitutional" constraints under which political parties choose both regulatory objectives and regulatory instruments, it is difficult to imagine why we should expect the recommendations of the Economic Council of Canada to commend themselves particularly to political parties in the first place or, where accepted, to affect significantly the pattern of regulation we presently observe. Without changing the constraints under which politicians choose policies, advocating a different calculus of choice from that implied by their political self-interest is simply to preach political irrationality.

Consideration of possible changes in existing political constraints might entail examining such issues as the following: the electoral rules that determine relevant voter margins (e.g. the case for proportional representation and the powers and composition of the Senate); rules on party and campaign financing (to reduce dependence on interest group "trades"); subsidization of thinly spread interest groups (to offset the information and organization costs faced by such groups); the division of powers among different levels of government (the disaggregation of voting decisions implied by decentralization); freedom-of-information legislation (again, to reduce voters' information costs); and constitutional constraints on government activities [see Buchanan, 1975], to restrain negative-sum rent-seeking games by interest groups. It is sufficient for our purposes to emphasize that the choice of governing instrument must be analysed as an exercise in constrained decision making. Only by identifying, and then changing, the constraints is the decision calculus likely to be significantly influenced. Some of the recommendations of the Economic Council, in its interim report, might indeed affect certain political constraints. The proposals for *ex ante* and *ex post* evaluation of regulatory impacts would reduce information costs for some interests. Proposals to fund "public interest" group participation in the regulatory process would reduce the cost of access to influence for some groups. Most of the Council's recommendations would not, however, affect the underlying political dynamics of regulation but, instead, would accept them as given.

Observations by Aaron Wildavsky [1964, pp. 131-33] on the concept of budgetary reform are easily transposed to the present context:

> "If the present budgetary process is rightly or wrongly deemed unsatisfactory, then one must alter in some respect the political system of which the budget is but an expression. It makes no sense to speak as if one could make drastic changes in the budgetary process without also altering the distribution of influence. But this task is inevitably so formidable ... that most adversaries prefer to speak of changing the budgetary process, as if by some subtle alchemy the intractable political element could be transformed into more malleable substance. One implication is that by far the most significant way of influencing the budget is to introduce basic political changes. A second implication is that no significant change can be made in the budgetary process without affecting the political process. Since the budget represents conflicts over whose preferences shall prevail, the third implication is

that one cannot speak of "better budgeting" without considering who benefits and who loses or demonstrating that no one loses. Just as the supposedly objective criterion of "efficiency" has been shown to have normative implications, so a "better budget" may well be a cloak for hidden policy preferences."

Because of the failure of the Economic Council in its interim report to acknowledge fully the essentially political nature of regulation, the report also fails to articulate a coherent view of what constitutes "responsible regulation" – responsible to whom, for what? Any such view seems unlikely to be able to avoid a commitment to a highly normative conception of "good government." "Good government" might be judged in terms of substantive outcomes: Does a government activity enhance the value of social resources (allocative efficiency), or does it promote some concept of distributive justice, or does it protect certain individual rights – or achieve some desired balance among these goals? Alternatively, "good government" might be defined in process terms: Do the processes of government comport with the desiderata of a well-functioning democracy? If they do, policy outcomes might be assumed to be socially optimal. Under either approach, we could then examine how our present collective decision-making outcomes or processes diverge from these norms. Finally, prescriptions could be offered as to how to reform our collective decision-making processes so as to remove these divergences.

It may well be that addressing political reform in this way was outside the Economic Council's terms of reference and perhaps its competence. It is easy to sympathize with the reluctance of the Council, as an economic advisory body, to embark upon such an exercise. Because the fundamental question that the Council was asked to answer is not an economic question at all, but a political question – asking how we can achieve superior regulation is equivalent to asking how we can achieve a better system of politics – the question cannot be answered solely from an economic perspective. That the Council may have been asked a question that it cannot answer (perhaps designedly so) cannot be an excuse for naïveté on its part. Failure at least to acknowledge emphatically the essential identity of issues of regulatory and political reform runs the serious risk of having the Council's extensive work on regulation contribute unwittingly to a public delusion (perhaps politically expedient) that a great deal in the way of significant regulatory reform can be accomplished without major reforms of our political institutions and processes. If the latter are not on the public agenda at this time, it may well be that the Council cannot hope to have done more than address its attention to quite modest, micro, regulatory reforms designed simply to redress particular instances of unintended perversities, irritations, and frictions in the regulatory process. Reducing delays, duplication, and paperwork may not be exalted goals; but they are probably all we are left with if major political reforms lie outside our collective will or capacity.

If the basic postulate of this study is valid, that the choice of policy instrument is dominated by the search for electoral success rather than "efficiency" considerations, it would seem to follow that this holds true for all policy decisions. This implies that if one wishes to change policies in a significant and lasting way, it is necessary to change some extremely fundamental dimensions of the political system. In particular, changes in the rules and incentives that constitute the political system would seem to be required. The policy "outcomes" are unlikely to be altered until the structure and processes that generate them are also altered.

Could such fundamental changes in the political system occur without concomitant changes in the economic system? Would the myriad of special interest groups that have "accommodated" themselves to universal suffrage, within or through the prevailing political system, countenance a major change in the system? To what extent are divergences in our political system from an egalitarian theory of democratic entitlements conscious social compromises with the inequalities of wealth required by an economic system driven by private incentives? As interesting and important as these questions are, to pursue them would be to launch another study.

While this extensive domain of issues cannot be explored here, it is possible to ask another question. If the key to policy change involves making changes – of an unspecified sort – in the political and economic systems, what are the implications for economic research?

A large body of economic research is undertaken as part of an inward-looking professional game. Presumably that is unaffected by changes in perceptions about the role of economics (or the other social sciences, for that matter) in the policy-making process. Turning to the work that has been oriented towards policy improvement, it would seem to be implied by the line of argument advanced here that, for the most part, the work of economists will inevitably not be viewed by politicians primarily as a source of intelligence about the world. Rather it will be construed as posing a problem if it lends support to an opponent or as part of the "solution" if it lends support to the particular politician. In short, the flow of economic research might perhaps be thought of as a flow of expert witnesses appearing in an endless adversarial proceeding – sometimes helping one side,

sometimes another; sometimes being suppressed; sometimes being distorted, twisted, and trivialized for the benefit of a "user."

One perception does seem essentially puerile: the notion that governments can be looked upon as ignorant, benevolent dictators who want to do the "right" thing, who are all-powerful, and who are simply waiting for the economists to tell him, her, or it what to do. If the competition among parties is vigorous and if the pressure of competing interest groups is intense, the policy vacuum just described seldom if ever exists. This is not to say that the policies under consideration at any one time are in any sense optimal, although the meaning of optimal in this context is far from clear. What is implied, however, is that, with rare exceptions, policy proposals based on the results of economic research are in competition with proposals based on other considerations.

There would seem to be one general area where economic research has a unique role to play, even under the "electoral success-maximizing" assumption. Policies adopted today for short-term political reasons can later produce major, unforeseen, negative effects or side effects. If the time horizon of the electorate is short, the politician can afford to make decisions on that basis; future adverse consequences can be ignored. On the other hand, if the politician believes he will probably have to cope with the negative effects, then these will bulk larger in the decision. It is here that economic research can make a significant, and perhaps unique, contribution. The discipline of economics bestows, admittedly most imperfectly, some comparative advantage in inferring the longer-term and indirect consequences of alternative policy actions.

Although the views of economists and social scientists on normative matters have no particular merit, disentangling the full and longer-term implications of alternative policies can presumably improve policy when politicians have options consistent with their political survival. Despite what may appear to be the somewhat cynical tone of some of this study, we are inclined to believe that when politicians perceive that they have such choices they are likely to choose, *on the basis of the information available to them*, policies that affect broadly based longer-term interests rather than policies that pander to narrow, short-term interests. Economists, and others, can assist them to make these choices by providing them with more or better information on the policy implications of the options.

When thinking of policy making, one immediately thinks of politicians and their supporting bureaucrats. In fact, of course, casting a ballot is a policy decision for the voter, as is the decision to join a pressure group, and so on. It is assumed here that all of these decisions are based on the pursuit of the individual's self-interest – individuals are assumed to be rational and to choose the alternative that they expect will give them the most satisfaction (utility). The information upon which such decisions are made is inherently limited (e.g. bounded rationality and rational ignorance). Economic research, by providing a public good, can add to the information available and improve these "private" decisions – just as it can those of politicians – if it is disseminated.

It is important to realize that by influencing voter knowledge and understanding, and hence voter decisions, the insights of economic research (and social science research generally) can be brought to bear on the ultimate decision-making process. Indeed, these effects of new information may be much more effective than the provision of direct information to bureaucrats and politicians. When few voters are aware of it, the latter can often ignore new information when it does not suit their convenience. Politicians cannot, however, easily ignore voters armed with relevant information. One might wonder why so much research is written and "published" with little if any attention being paid to the dissemination of the results generally. So many economists write – when not writing to one another – as though their task were to advise the Prince rather than the public.

Notes

CHAPTER 2

1 Defence is the classic example of a pure public good. Such goods are characterized by two facts: 1/ Consumption by *A* does not diminish the amount available for *B*, *C* ...; and 2/ those who do not pay for the good cannot be excluded from the enjoyment of the benefit provided.

2 Some of the many meanings of this illusive term are discussed briefly at the end of this chapter.

3 The fundamental concept is derived from Olson [1965]. In the long run one would expect that the supra-normal profits achieved by the few from the investment in government influence would attract new entrants. The few, however, can often capitalize on the gain, with the result that less informed "late comers" to whom they sell their assets only earn a normal rate of return.

4 As noted earlier, political parties have much in common with special interest groups as defined here. Indeed, perhaps the parties should be though of as a subset of special interest groups. Their nomination function in the political process, however, is unique and, for our purpose, dominates their other functions.

5 A case can be made for the inclusion of Justice, External Affairs, Supply and Services, and Public Works in the list of central agencies.

CHAPTER 3

1 The outputs of the two systems would be radically different because, under one, preferences must be backed up by willingness to pay while, under the other, this is not required. Effective demands under the two systems would be influenced accordingly.

CHAPTER 4

1 As a result, this chapter is structured somewhat differently from Chapters 5 through 8 in that in this chapter the substitutability of inquiries with other instruments is dealt with before, and more briefly than, the substitutability among the different types if inquiries.

2 One type of inquiry that we do not study is the visible reorganization of government agencies and the creation of new ones. These are usually the output of an earlier inquiry and a prelude to the active utilization of some other instrument.

3 See Law Reform Commission [1977], which cites almost fifty federal statutes under which commissions of inquiry can be appointed. In addition, another forty federal statutes confer various powers of inquiry without reference to the *Inquiries Act*.

4 This is not to suggest that the government cannot exercise a degree of control over commissions through budgets, salary and fee schedules, and so on. It is at best an indirect method of control, however, exercised on an *ad hoc* basis. This may be subject to change. At least in Ontario, the political reaction to perceived extravagances of some recent commissions has led to the adoption of greater and more uniform financial controls.

5 The shortage of staff resources for committees is a constant source of criticism and proposals for reform. D'Aquino et al. [1979, p. 91], for example, state: "The last obstacle that several people interviewed believe stands in the way of more effective committee work is lack of adequate staff to help with the substantive work of committees. . . . if the work of committees is to become much more important as members bring their individual minds and talents to bear on policy formulation, scrutiny of bills, and efforts to hold the government to account for spending and administration, then a way will have to be desired to provide the staff support in the most efficient way. Some committees could probably benefit from permanent staff immediately. Others will continue to require more flexible arrangements to suit their changing needs."

6 Similarly, the Royal Commission on Corporate Concentration (1978) produced 34 volumes of studies on Canadian industrial organization.

7 In this vein, see Lithwick [1969, p. 250, cited in Wilson (1971), p. 125], wherein it is stated of a task force that: "[Since it] has neither the expertise nor the research findings to deal with the serious urban issues such as urban growth and urban land use, one should not be surprised that it has stressed the non-issues which as finding out what people want and need. Without attaching price tags, people want everything from houses to yachts to a country house in the Caribbean."

8 There are, of course, exceptions. The MacGuigan Committee's report on prison conditions is the one

most often cited [see Sub-Committee on the Penitentiary System, 1977].

9 A recent example of this technique was the referral, in March 1977, of the Stage II competition policy legislation after First Reading to the House of Commons Standing Committee on Finance, Trade and Economic Affairs, which led to the *Proposals for Change* [1977].

10 As LeDain has stated [in Ziegel (1973), p. 84, cited in Berger (1977), p. 224]: "It was our search for the issues and a general perspective, as well as a sense of social feasibility – what the society was capable of – that made us conduct the kind of hearings we did. We were looking also for the range of attitudes and wanted to hear those most deeply involved. These hearings made a deep impression on us. At times they were moving. One of the things we discovered is that we need public opportunities for the exchange of views on vital issues. The hearings provided a public occasion for people to say things to each other that they had obviously never said before. I think that the public inquiry can respond to the need for some extension of the regular electoral process on the social level, a process in which the public can contribute to the identification and discussion of issues."

11 Again, there are exceptions. The Alaska Highway Pipeline Inquiry (the Lysyk Inquiry) reported on time, almost to the day, in 1977. Similarly, the Interim Report of the Economic Council's Regulation Reference responded to an externally imposed deadline.

CHAPTER 5

1 It is interesting to note that the current wave of severe inflation has been explained primarily as an attempt by western governments, and the United States in particular, to "cheat" OPEC oil producers by paying for imported oil in U.S. dollars of ever falling value rather than as an attempt to cheat their own residents.

2 Those of a conservative bent emphasize, among other things, that attempts to redistribute the shares of a given pie exact an inordinate cost in terms of the growth of the pie forgone. In other words, they argue that more individuals would be better off in *absolute* terms if governments did not seek to reduce income/wealth inequalities in relative terms. Recent studies, although vulnerable to methodological criticism, would suggest that despite massive government efforts to redistribute income, little, if anything, has changed. Taken at face value, one would be forced to conclude that the resource-allocative inefficiencies introduced by the higher taxes required to finance massive transfer payments have not been offset by corresponding benefits. As is so frequently the case in the social sciences, however, it is certainly possible to argue about the validity of "the numbers." And, perhaps more important, as stated above, if many voters did not *perceive* that the government was seeking to reduce income/wealth inequalities, it is an open question as to the ultimate stability of our political-economic system. See Gillespie [1976], p. 419.

3 The revenues of the provinces (other than Quebec, which levies its own tax) were adversely affected by indexation of personal income tax because provincial income taxes are calculated as a percentage of the basic federal tax.

4 Tax expenditures, the term used to describe the revenues forgone by virtue of concessionary provisions in taxing statutes (concessionary relative to an "ideal" or "neutral" system), are extremely important in Canada. The official estimates published in 1979 by the Department of Finance, Ottawa, suggest that the revenues forgone were approximately $30 billion – a sum in excess of 60 per cent of all direct government expenditures. Although it is not difficult to quarrel with this particular estimate, because it is by no means obvious in some instances whether a particular provision is part of the basic ("ideal" or "neutral") tax structure or whether it constitutes a concession, few would deny that tax expenditures are a massively important policy instrument [see McLoughlan and Proudfoot (1981), pp. 328-37; Woodside (1979), pp. 248-56; and references cited therein].

5 In essence the federal government gave the provinces "tax room" (i.e. tax points) in lieu of the shared-cost programs. This meant that the provincial government personal income tax, which is a percentage of the federal basic tax, increased dramatically. For details, see Canadian Tax Foundation [1978].

6 See the *Regional Development Incentives Act*, R.S.C. 1979, c. R-3; and the *Department of Regional Economic Expansion Act*, R.S.C. 1970, c. R-4. The crucial wording is contained in section 7(1)(a) of the former Act. In essence, it gives the Minister the authority to make grants to firms only when he believes that their expansion would not take place without the grant.

CHAPTER 6

1 This discussion merely hints at the complexity of the definitional problem. For a fuller treatment of the issue, see section 2 of Trebilcock and Prichard [forthcoming]. For the leading reference sources, see the Lambert Report [1979], Part IV; Privy Council "Blue Paper" [1977], pp. 13ff; and Langford [1980], p. 76.

2 This definition departs from the legal definition pursuant to the *Financial Administration Act*, R.S.C. 1970, F-10.

3 For example, the expropriation of Eldorado Mining can be explained primarily in these terms [see Trebilcock and Prichard (forthcoming), Sec. 4].

4 For example, both Telesat and Petro-Canada are responsive to this consideration.

5 In this respect, the agency literature on finance theory is highly relevant [see, for example, Jensen and Mecklin (1976), p. 305; and Fama, 1978].

6 For an extended review of this proposition, see Trebilcock and Prichard (forthcoming), Sec. 4, on which the above summary is based.

7 Little has been written to date in Canada on privatization [see, however, Sexty (1978*b*), p. 9; Ohashi and Roth, 1980; and Sexty, forthcoming].

CHAPTER 7

1 The Ontario *Environmental Protection Act* [S.O. 1971, c. 86, section 14(1)] provides that "... no person shall ... discharge a contaminant into the natural environment that (a) causes or is likely to cause impairment of the quality of the natural environment for any use that can be made of it."

2 This term is extensively employed by the Economic Council [1979, Chap. 5]; the U.S. literature on regulation often refers to such agencies as "independent" regulatory agencies, but different constitutional infrastructures call for care in transposing the term to a Canadian setting.

3 For a survey of recent reform proposals, see Thompson (1980), Chap. 5.

4 For discussions of methodological difficulties entailed in preparing tax expenditure budgets, see Smith [1979]; Dept. of Finance [1979]; and Maslove [1979, Chap. 9].

Bibliography

ALCHIAN, A. A., and DEMSETZ, H. "Production, Information Costs, and Economic Organization," *American Economic Review* 62(1972):777-95.

AMERICAN ENTERPRISE INSTITUTE. *Postal Service Legislative Proposals*, 1977.

ANDERSON, F. R. et al. *Environmental Improvement Through Economic Incentives*. Baltimore: Johns Hopkins Press, 1977.

ARROW, Kenneth. *Social Choice and Individual Values*. New York: John Wiley and Sons, 1951.

ASHLEY, C. A., and SMAILS, R.G.H. *Canadian Crown Corporations*. Toronto: Macmillan, 1965.

BAUMOL, W. J., and OATES, W. E. *Economics, Environmental Policy, and the Quality of Life*. Englewood Cliffs: Prentice-Hall, 1979.

BECKER, Gary. "Competition and Democracy," *Journal of Law and Economics* (1958):105-108.

———. "Comment," *Journal of Law and Economics* (1976):245-48.

BENTLEY, A. F. *The Process of Government*. Chicago: University of Chicago Press, 1980.

BERGER, Thomas R. *Northern Frontier, Northern Homeland: the Report of the MacKenzie Valley Pipeline Inquiry*, vol. 2. Ottawa: Supply and Services Canada, c. 1977.

BERNSTEIN, J. I., and GREEN, C. "The Incidence of the Private and Social Cost of Compliance." Economic Council of Canada, Regulation Reference, 1981.

BERRY, J. M. *Lobbying for the People*. Princeton, N.J.: Princeton University Press, 1978.

Bill C-27. First Reading, November 26, 1979.

Bill C-42. First Reading, July 17, 1980.

BIRD, R. M. *Financing Canadian Government: A Quantitative Overview*. Toronto: Canadian Tax Foundation, 1979.

BLAKE, D. E. "LIP and Partisanship," *Canadian Public Policy* 2(1976):17-32.

BLUM, W. J., and KALVEN, H. *The Uneasy Case for Progressive Taxation*. Chicago: University of Chicago Press, 1953.

BORCHERDING, T. "A Positive Theory of Public Enterprise," in *Crown Corporations: The Calculus of Choice*, edited by J.R.S. Prichard. Toronto: Butterworths (forthcoming).

BORCHERDING, T., and DOROSH, G. "The Egg Marketing Board." Vancouver: Fraser Institute, 1981.

BORINS, S. "World War II Crown Corporations: Their Functions and Their Fate," in *Crown Corporations: The Calculus of Choice*, edited by J.R.S. Prichard. Toronto: Butterworths (forthcoming).

BRETON, A., and SCOTT, A. *The Economic Constitution of Federal States*. Toronto: University of Toronto Press, 1978.

BRETON, A., and WINTROBE, R. "An Economic Analysis of Bureaucratic Efficiency." Law and Economics, Workshop Series (II-5). University of Toronto, Faculty of Law, 1979.

BREYER, Stephen. "Analysing Regulatory Failure: Mismatches, Less Restrictive Alternatives and Reform," *Harvard Law Review* 92(1972):549-609.

BROADWITH, HUGUES AND ASSOCIATES. "The Ontario Milk Marketing Board," *Government Regulation*. Toronto: Ontario Economic Council, 1978.

BUCHANAN, J. *The Limits of Liberty*. Chicago: University of Chicago Press, 1975.

BUCHANAN, J., and TULLOCK, G. *The Calculus of Consent*. Ann Arbor: University of Michigan Press, 1962.

———. "Polluters, Profits and Political Response: Direct Controls versus Taxes," *American Economic Review* 65(1975):139-47.

BULMER, M. *Social Research and Royal Commissions*. London: Allen and Unwin, 1980.

BURK (BERGSON), A. "A Reformulation of Certain Aspects of Welfare Economics," *Quarterly Journal of Economics* 52(1938):10-34.

CAMERON, David R. "The Expansion of the Public Economy: A Comparative Analysis," *American Political Science Review* 73(1978):1243.

Canada Business Corporations Act. S.C. 1974-75-76, c. 33.

CANADA, COMMISSION OF INQUIRY CONCERNING CERTAIN ACTIVITIES OF THE ROYAL CANADIAN MOUNTED POLICE. Ottawa: Supply and Services Canada, c. 1980-81.

Canada Companies Act. R.S.C. 1970, c. C-32.

CANADA, DEPARTMENT OF FINANCE. *Economic Review*. Ottawa: Supply and Services Canada, 1978.

———. *Government of Canada Tax Expenditure Account*. Ottawa: Department of Finance, December 1979.

Canada Labour Code. R.S.C. 1970, c. L-1.

CANADA, ROYAL COMMISSION ON FINANCIAL MANAGEMENT AND ACCOUNTABILITY. *Report*. Ottawa: Information Canada, 1970.

CANADIAN TAX FOUNDATION. *National Finances: 1977-78*. Toronto: Canadian Tax Foundation, 1978.

———. *National Finances: 1978-79*. Toronto: Canadian Tax Foundation, 1979.

———. *National Finances: 1979-80*. Toronto: Canadian Tax Foundation, 1980.

CHANDLER, M. "The Politics of Public Enterprise," in *Crown Corporations: The Calculus of Choice*, edited by J.R.S. Prichard. Toronto: Butterworths (forthcoming).

CHAPMAN, R. A. *The Role of Commissions in Policy Making*. London: Allen and Unwin, 1973.

CLARK, Colin. "Public Finance and Changes in the Value of Money," *Economic Journal* 55, no. 220 (1945).

COASE, R. "The Nature of the Firm," *Economica* 4(1937):386-405.

Consumer Packaging and Labelling Act. S.C. 1970-71-72, c. 41.

COURCHENE, T. "Energy and Equalization," *Energy Policies for the 1980s*, vol. 1. Toronto: Ontario Economic Council, 1980.

COURVILLE, L. *Responsible Regulation: Rules versus Incentives*. Montreal: C. D. Howe Research Institute, 1980.

DAHL, R. A. *A Preface to Democratic Theory*. Chicago: University of Chicago Press, 1956.

———, and LINDBLOM, C. E. *Politics, Economics and Welfare*. New York: Harper, 1953.

D'AQUINO, T.; DOERN, B.; and BLAIR, C. *Parliamentary Government in Canada: A Critical Assessment and Suggestions for Change*. Ottawa: Intercounsel Limited, 1979.

DEMUTH, C. "The Regulatory Budget," *Regulation*. March/April 1980.

Department of Regional Economic Expansion Act. R.S.C. 1970, c. R-4.

DEWEES, D. N. "Instrument Choice in Environmental Policy." University of Toronto, Law and Economics Workshop Paper WSII-13, February 6, 1980.

DOERN, B. "The Cabinet and Central Agencies," in Doern and Aucoin, *Public Policy in Canada*. Toronto: Macmillan, 1979.

DOERN, B., and AUCOIN, P. *The Structures of Policy-Making in Canada*. Toronto: Macmillan, 1971.

———. "The Role of White Papers," in Doern and Aucoin, *The Structures of Policy-Making in Canada*. Toronto: Macmillan, 1971.

———. "Bibliography on the Structures of Policy-Making in Canada," in *The Structures of Policy-Making in Canada*. Toronto: Macmillan, 1971.

———. *Public Policy in Canada*. Toronto: Macmillan, 1979.

———. "Conclusions and Observations," in *Issues in Canadian Public Policy*. Toronto: Macmillan, 1974.

DOERN, G. Bruce, and MASLOVE, Allen M. ed. *The Public Evaluation of Government Spending*. Proceedings of a conference sponsored by the Institute for Research on Public Policy and the School of Public Administration, Carleton University, Ottawa, October 19-21, 1978.

DOERN, G. Bruce, and WILSON, V. S. "Conclusions and Observations," in Doern and Aucoin, *The Structures of Policy-Making in Canada*. Toronto: Macmillan, 1971.

———. *Issues in Canadian Public Policy*. Toronto: Macmillan, 1974.

DORFMAN, R. "Forty Years of Cost-Benefit Analysis." Harvard Institute of Economic Research. Discussion Paper No. 498, Cambridge, Mass., 1976.

DOWNS, A. *Inside Bureaucracy*. Boston: Little Brown, 1967.

———. *An Economic Theory of Democracy*. New York: Harper, 1957.

EATON, A. K. *Essays in Taxation*. Toronto: Canadian Tax Foundation, 1966.

ECONOMIC COUNCIL OF CANADA. *Living Together: A Study of Regional Disparities*. Ottawa: Supply and Services Canada, 1977.

———. *Responsible Regulation: An Interim Report by the Economic Council of Canada*. Ottawa: Supply and Services Canada, 1979.

EDELMAN, J. C. *The Symbolic Uses of Politics*. Chicago: University of Chicago Press, 1964.

ENGLEHART, K. G., and TREBILCOCK, M. J. "Public Participation in the Regulatory Process: The Issue of Funding." Economic Council of Canada, Regulation Reference, Working Paper No. 17, Ottawa, 1981.

Environmental Protection Act. S.O. 1971, c. 86.

Environmental Protection Act. Section 5(1), S.O. 1971, c. 86.

FAMA, E. F. "Agency Problems and the Theory of the Firm." Center for Research on Security Prices, Working Paper No. 20. Chicago: University of Chicago, 1978.

Financial Administration Act. R.S.C. 1970, F-10.

Fisheries Act. Section 33(4), R.S.C. 1970, c. F-14, as amended by S.C. 1977, c. 35.

Food and Drugs Act. R.S.C. 1970, H-3.

FORBES, J. et al. *A Report on Consumer Interest in Marketing Boards*. Ottawa: Consumer Research Council, 1974.

FRANKS, C.E.L. "The Dilemma of the Standing Committees of the Canadian House of Commons," *Canadian Journal of Political Science* 4(1971):461.

FRIEDMAN, M. "Occupational Licensure," *Capitalism and Freedom*. Chicago: University of Chicago Press, 1962.

FRIEDMAN, Milton. *Free to Choose: A Personal Statement*. New York: Harper, Brown & Kavanovich, 1980.

GELLHORN, W. "The Abuse of Occupational Licensing," *University of Chicago Law Review* 44(1976):6.

GILLESPIE, W. I. "On the Redistribution of Income in Canada," *Canadian Tax Journal* 22(1976):417.

GORDON, H. S. "The Demand and Supply of Government: What We Want and What We Get." Economic Council of Canada Discussion Paper 79, Ottawa, 1977.

GOVERNMENT OF CANADA. *Tax Expenditure Account*. Ottawa: Privy Council Office and Department of Finance, 1979.

GRUBEL, H., and SCHWINDT, R. "The Real Cost of the B.C. Milk Board." Vancouver: Fraser Institute, 1978.

HARBERGER, A. C. *Taxation and Welfare*. Boston: Little Brown, 1974.

HARTLE, Douglas G. *A Theory of the Expenditure Budgetary Process*. A document prepared for the Ontario Economic Council. Toronto: University of Toronto Press, 1976.

——— (1979a). *Public Policy Decision Making and Regulation*. Montreal: Institute for Research on Public Policy, Toronto: Butterworths, 1979.

——— (1979b). "The Report of the Royal Commission on Financial Management and Accountability (the Lambert Report): A Review," *Canadian Public Policy* 3(1979):366-82.

Hazardous Products Act. R.S.C. 1970, H-3.

HEAD, G. *Public Goods and Public Welfare*. Durham, N.C.: Duke University Press, 1974.

HECLO, H. *Modern Social Politics in Britain and Sweden*. New Haven, Conn.: Yale University Press, 1976.

HOCKIN, T. A. "The Advance of Standing Committees in Canada's House of Commons," *Canadian Public Administration* 13(1970):185.

———. *Apex of Power*. 2d ed. Toronto: Prentice-Hall, 1977.

HODGETTS, J. E. "Should Canada Be De-Commissioned? A Commoner's View of Royal Commissions," *Queen's Quarterly* 70(1964):475-90.

———. *The Canadian Public Service: A Physiology of Government, 1967-1970*. Toronto: University of Toronto Press, 1973.

HOOS, S. S., ed. *Agricultural Marketing Boards – An International Perspective*. Cambridge, Mass.: Ballinger, 1979.

HOUSE OF COMMONS STANDING COMMITTEE ON FINANCE, TRADE AND ECONOMIC AFFAIRS. *Fourteenth Report to the House of Commons: Proposals for Change*. Ottawa, 1977.

Income Tax Act. S.C. 1970-71-72, c. 63.

Inquiries Act. R.S.C. 1970, c. I-13.

JANISCH, H. "Policy Making in Regulation: Towards a New Definition of the Status of Independent Agencies in Canada," *Osgoode Hall Law Journal* 17(1979):46-106.

JENNINGS, Edward T. "Competition, Constituencies and Welfare Policies in American States," *American Political Science Review* 73(1979):414-29.

JENSEN, M. C., and MECKLIN, W. H. "Theory of the Firm: Managerial Behaviour, Agency Costs, Ownership Structure," *Journal of Financial Economics* 3(1976):305-60.

KANE, T. G. *Consumers and the Regulators: Intervention in the Federal Regulatory Process*. Montreal: Institute for Research on Public Policy, 1980.

KANTOR, B. "Rational Expectations and Economic Thought," *Journal of Economic Literature* 17(1979):1422-41.

KEY, V. O. *Southern Politics in State and Nation*. New York: A. A. Knopf, 1949.

KIRSCH, E. "The Legal Environment of Federal Crown Corporations." University of Toronto Law and Economics Programme, 1979 (mimeograph).

KNEESE, A. V., and SCHULTZE, C. *Pollution, Prices and Public Policy*. Washington: Brookings, 1975.

Labour Relations Act. R.S.O. 1970, ch. 232 (amended 1980).

THE LAMBERT REPORT. See Royal Commission on Financial Management and Accountability.

LANGFORD, J. W. "The Identification and Classification of Federal Public Corporations: A Preface to Regime Building," *Canadian Public Administration* 23(1980):76-104.

LAW REFORM COMMISSION OF CANADA. *Commissions of Inquiry*. Working Paper 17, 1977.

———. *Advisory and Investigatory Commissions*, 1979.

LINDAHL, E. "Just Taxation – A Positive Solution and Some Controversial Questions in the Theory of Public Finance," in *Classics in the Theory of Public Finance*, edited by R. A. Musgrave and A. T. Peacock. Toronto: Macmillan, 1958.

LINDBLOM, Charles E. "The Science of 'Muddling Through'," *Public Administration Review* 19(1959):79-88.

———. *The Intelligence of Democracy*. New York: Free Press, 1965.

———. *The Policy-Making Process*. Englewood Cliffs, New Jersey: Prentice-Hall, 1968.

LITHWICK, N. H. "Housing: In Search of a Crisis," *Canadian Forum* (February 1969):250-51.

LOWI, Theodore. "American Business, Public Policy, Case Studies, and Political Theory," *World Politics* 16(1964):677-715.

———. *The End of Liberalism*. New York: W. W. Norton & Company, 1969 and 1979.

———. "Decision Making versus Policy Making: Towards an Antidote for Technocracy," *Public Administration Review* 30(1970):314-25.

———. "Four Systems of Policy, Politics and Choice," *Public Administration Review* 32(1972).

LUTTBEG, N. R. *Public Opinion and Public Policy: Models of Political Linkage*. Homewood, Illinois: Dorsey Press, 1968.

MACNAUGHTON, B. D., and WINN, C. J. "Economic Policy and Electoral Self-Interest: The allocations of the Department of Regional Economic Expansion." *Canadian Public Policy* 7(1981):318.

MCCLOSKY, Herbert et al. "Issue Conflict and Consensus among Party Leaders and Followers," *American Political Science Review* (1960):406-27.

MCFADDEN et al. *A License to Print Money? Market Structure and Performance in Canadian Broadcasting*. Montreal: Institute for Research on Public Policy (forthcoming).

THE MCRUER REPORT. See Ontario Royal Commission of Inquiry into Civil Rights (James Chalmers McRuer, Chairman).

MCLOUGHLAN, K., and PROUDFOOT, S. B. "Giving by Not Taking: A Primer on Tax Expenditures," *Canadian Public Policy* 7, no. 2 (Spring 1981):328.

MCMANUS, John C. "The Costs of Alternative Economic Organization," *Canadian Journal of Economics* 8(1975):333-50.

———. "On the Efficient Design of an Agricultural Marketing Board." Ottawa: Department of Consumer and Corporate Affairs, 1978.

MILLER, W. E., and STOKES, D. E. "Constituency Influence in Congress," *American Political Science Review* 57(1963):45-56.

MINTZ, M. "Mixed Ownership." Working Paper. Kingston: Queen's University, 1979.

MUELLER, D. *Public Choice*. Cambridge: Cambridge University Press, 1979.

MUNRO, John M. "Highways in British Columbia: Economics and Politics," *Canadian Journal of Economics* 8(1975):192-204.

MUZONDO, T., and PASTERKA, B. *Professional Licensing and Competition Policy: Effects of Licensing on Earnings and Rates of Return Differentials*. Ottawa: Department of Consumer and Corporate Affairs, 1979.

NISKANEN, W. *Bureaucracy: Servant or Master?* Institute of Economic Affairs, 1973.

———. *Bureaucracy and Representative Government*. Chicago: Aldine, Atherton, 1979.

OHASHI, T. M., and ROTH, T. P. *Privatization: Theory and Practice*. Vancouver: Fraser Institute, 1980.

OLSON, M. *The Logic of Collective Action*. Cambridge, Mass.: Harvard University Press, 1965.

ONTARIO ROYAL COMMISSION INQUIRY INTO CIVIL RIGHTS. *Report* (the McRuer Report), vol. I, no. 3. Toronto: Queen's Printer, 1968.

PATTISON, John C. "Dividing the Power to Regulate," *Canadian Confederation at the Crossroads*. Vancouver: Fraser Institute, 1978.

PELTZMAN, Sam. "Toward a More General Theory of Regulation," *Journal of Law and Economics* 19(1976):211-40.

PHIDD, R. W., and DOERN, G. B. *The Politics and Management of Canadian Economic Policy*. Toronto: Macmillan, 1978.

PRINCE, M. J. "Policy Advisory Groups in Government Departments," in Doern and Aucoin, *Public Policy in Canada*. Toronto: Macmillan, 1979.

PRIVY COUNCIL OFFICE. *Crown Corporations: Direction, Control, Accountability* (referred to herein as the "Blue Paper"). Ottawa: Privy Council, 1977.

PRYOR, F. L. "Public Ownership: Some Quantitative Dimensions," in W. G. Shepherd, *Public Enterprise: Economic Analysis of Theory and Practice*. Lexington: D. C. Heath and Co., 1976.

Public Service Employment Act. R.S.C. 1970, c. P-32.

Public Service Staff Relations Act. R.S.C. 1970, c. P-35.

REA, S. "Incentive Effects of Alternative Negative Tax Plans," *Journal of Public Economics* 3(1974):237-49.

———. "Unemployment Insurance and Labour Supply: A Simulation of the 1971 Unemployment Insurance Act," *Canadian Journal of Economics* 10, no. 2 (1977):263-78.

Regional Development Incentives Act. R.S.C. 1979, c. R-3.

REPORT OF A STUDY GROUP TO THE POSTMASTER GENERAL. *Considerations Which Affect the Choice of Organization Structure for the Canada Post Office*. Ottawa, 1978.

ROYAL COMMISSION ON TAXATION. *Report*, vol. 1. Ottawa: Queen's Printer, 1967.

SCHINDLER, F., and LANPHIER, C. M. "Social Science Research and Participatory Democracy in Canada," *Canadian Public Administration* 12(1969):481.

SCHUBERT, G. *The Public Interest*. New York: Free Press, 1960.

SCHULTZE, Charles L. *The Politics and Economics of Public Spending*. Washington: Brookings, 1968.

———. *The Public Use of Private Interest*. Washington: Brookings, 1978.

SEXTY, R. (1978*a*). "Canadian Government Business Corporations: Definition and Characterization." Working Paper 78-7. Mimeograph, 1978.

———. (1978*b*). "The Profit Role in Crown Corporations," *The Canadian Business Review* (Summer 1978).

———. "Autonomy Strategies of Government Owned Business Corporations in Canada," *Strategic Management Journal* (forthcoming).

SHEPHERD, W. G. *Public Enterprise: Economic Analysis of Theory and Practice*. Lexington, Mass.: D. C. Heath and Co., 1976.

SHIROKY, P., and TREBILCOCK, M. "Preserving the Uniformity of Law," *Canadian Confederation at the Crossroads*. Vancouver: Fraser Institute, 1978.

SHOUP, C. S. *Public Finance*. Chicago: Aldine Publishing Co., 1969.

SIMON, H. *Administrative Behaviour*. 3rd ed. New York: Free Press, 1976.

SIMON, Herbert A. "A Behavioural Model of Rational Choice," *Quarterly Journal of Economics* 69(1955):99-118.

———. *Models of Man*. New York: Wiley, 1957.

SMITH, Roger S. *Tax Expenditure: An Examination of Tax Incentives and Tax Preferences in the Canadian Income System*. Toronto: Canadian Tax Foundation, 1979.

STANBURY, W. *Government Regulation: Scope, Growth, and Process*. Montreal: Institute for Research on Public Policy, 1980.

STEVENS, Geoffrey. "The Case of Image Over Reality," *Globe and Mail*, Toronto, February 23, 1980, p. 10.

STEWART, J. B. "The Standing Committee: The Pattern Varied," in *The Canadian House of Commons*, 1977.

STIGLER, George J. "The Theory of Economic Regulation," *Bell Journal of Economics and Management Science* 2(1971).

SUB-COMMITTEE ON THE PENITENTIARY SYSTEM IN CANADA (M. MacGuigan, Chairman). *Report to Parliament*. Ottawa, 1977.

THOMPSON, F. "Regulatory Reform and Deregulation in the United States," in *Government Regulation, Scope, Growth, and Process*, edited by W. Stanbury. Montreal: Institute for Research on Public Policy, 1980.

TREBILCOCK, Michael J. et al. "Interprovincial Restrictions on the Mobility of Resources," *Intergovernmental Relations*. Toronto: Ontario Economic Council, 1977.

———. *Professional Regulation*. Toronto: University of Toronto Press, 1979.

TREBILCOCK, M. J., and PRICHARD, J.R.S. "Crown Corporations: The Calculus of Instrument Choice," in *Crown Corporations: The Calculus of Choice*, edited by J.R.S. Prichard. Toronto: Butterworths (forthcoming).

TREBILCOCK, M. J.; TUOHY, C. J.; and WOLFSON, A. D. *Professional Regulation*. A staff study of accountancy, architecture, engineering, and law in Ontario prepared for the Professional Organizations Committee. Toronto: Ministry of the Attorney General, 1979.

TREBILCOCK, Michael J.; WAVERMAN, L.; and PRICHARD, J.R.S. "Markets for Regulation: Implications for Performance Standards and Institutional Design," *Government Regulation: Issues and Alternatives*. Toronto: Ontario Economic Council, 1978.

TRUMAN, D. B. *The Governmental Process*. New York: Knopf, 1951.

TULLOCK, G. "The Transitional Gains Trap," *Bell Journal of Economics* 6(1975):671-78.

TUOHY, C. J., and WOLFSON, A. D. "The Political Economy of Professionalism: A Perspective," in *Four Aspects of Professionalism*. Ottawa: Consumer Research Council, 1977.

———. "Self-Regulation: Who Qualifies?," in *The Professions and Public Policy*, edited by P. Slayton and M. Trebilcock. Toronto: University of Toronto Press, 1978.

TUPPER, A. "The Nation's Business: Canadian Concepts of Public Enterprise." Unpublished Ph.D. thesis, Queen's University, 1977.

U.S. CONGRESS. *The Analysis and Evaluation of Public Expenditure*. A compendium of papers submitted to the Subcommittee on Economy in Government of the Joint Economic Committee, Superintendent of Documents, Washington, D.C., 1969.

U.S. SENATE COMMITTEE ON GOVERNMENTAL AFFAIRS. *Framework for Regulation*. Washington: U.S. GPO.

VINING, A. R., and BOTTERELL, R. "An Overview of the Origins, Growth, Size and Functions of Provincial Crown Corporations," in *Crown Corporations: The Calculus of Choice*, edited by J.R.S. Prichard. Toronto: Butterworths (forthcoming).

VON MISES, L. *Bureaucracy*. New Rochelle, N.Y.: Arlington House, c. 1969.

WEST, E. G., and WINER, Stanley L. "Optimal Fiscal Illusion and the Size of Government," *Public Choice* 35(1980):607-22.

WICKSELL, Knute. "A New Principle of Just Taxation, 1896," in *Classics in the Theory of Public Finance*, edited by R. A. Musgrave and A. T. Peacock. Toronto: Macmillan, 1958.

WILDAVSKY, A. *The Politics of the Budgetary Process*. Boston: Little Brown, 1964.

———. "The Political Economy of Efficiency," *Public Interest* 8(1967):30-48.

WILLES, Mark H. "Rational Expectations as a Counterrevolution," *Public Interest* (Special Issue, 1980):81-96.

WILLMS, A. M. "The Administration of Research on Administration and the Government of Canada," *Canadian Public Administration* 10(1967):405-16.

WILLIAMSON, O. *Market and Hierarchies*. New York: Free Press, 1975.

WILSON, T. A. "The Role of Royal Commissions and Task Forces," in Doern and Aucoin, *The Structure of Policy-Making in Canada*. Toronto: Macmillan, 1971.

WOODSIDE, K. "Tax Incentives as Subsidies: Political Considerations in Governmental Choice," *Canadian Public Policy* 5, no. 2 (Spring 1979):248-56.

ZIEGEL, J., ed. *Law and Social Change*. Toronto: Osgoode Hall Law School, York University, 1973.